

A Complete Bibliography of Publications in *IMA Journal of Numerical Analysis*

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)

WWW URL: <https://www.math.utah.edu/~beebe/>

07 April 2025

Version 1.106

Title word cross-reference

(k, l) [485, 486]. -1 [1493]. 1 [535, 557, 618, 1442, 1615]. $1/2$ [684]. $1/x$ [408]. 10 [1184]. 2 [641, 1004, 1432, 1643]. 3 [88, 276, 390, 894, 1316, 1496, 1638, 1804, 1969]. $3/4$ [1749]. 4 [60]. $[1, \infty)$ [408]. $1/2$ [777]. 2 [1256, 1268]. A [1326, 2125]. α [1928]. ap [1789]. $AX + YB = C$ [2252]. B [1187]. \mathbf{R}^3 [1392]. C^0 [322, 428, 592, 808, 1524]. C^1 [1736, 1872, 2023]. C^2 [765, 1876, 1638]. C_1 [1778]. \mathcal{F} [745]. \mathcal{Z} [675]. χ [11]. D [191, 244, 1994]. $DG(p)$ [1229]. $dG(s)$ [1044]. ϵ [125, 126, 1228, 2061]. G^1 [946]. G^2 [946]. γ [1521]. H [1275, 1858, 1881, 2155, 739, 749, 1239, 2033]. $H(\text{curl})$ [1199]. $H(\text{curl}; \Omega)$ [1550]. $H(\text{div})$ [908, 1200, 1177, 1497, 1757, 1758]. $H(\text{div}; \Omega)$ [1550]. H^{-1} [911]. H^1 [20, 55, 725, 1042, 1471, 1777, 1818, 2090]. H^2 [375, 607, 725]. $H^s(0, L)$ [216]. H_1 [890]. H_∞ [1721]. $H_p^\Lambda(I^d)$ [1058]. hp [35, 324, 517, 870, 1180, 1277, 1686, 1689, 2088, 2250, 777, 1065, 1063, 1755]. K [958, 746]. l [709]. $L(L^2)$ [802]. L^2 [55, 224, 431, 526, 827, 1147, 1559, 1561]. $L^2(H^1)$ [909]. $L^2(H_\gamma^1)$ [1355]. L^∞ [800]. $L^\infty(I; L^2(\Omega)^d)$ [270]. $L^\infty(L^2)$ [1062, 2057]. $L^\infty(L^\infty)$ [1229, 1230]. L^p [1051, 1211]. L^q [2060]. L_1 [1367, 2162, 1843, 1864, 2164, 2169, 2207, 2252]. L_2 [503, 1042, 1470, 695, 2168]. l_∞ [1864]. L_p [1499, 1653, 1654, 2163]. λ [1069]. LDL^T [1905, 1094, 745]. LR [1173]. LU [72, 1249, 1350, 1400, 2037]. M [647, 646, 1166]. $\mathbf{A} - \varphi$ [687]. $\mathbf{T} - \Omega$ [687]. \mathcal{H} [954]. $\mathcal{O}(\epsilon^{-3/2})$ [703]. P [580, 581, 661, 1343,

89, 275, 316, 325, 420, 785, 980, 1198, 1230, 1239, 1538, 1633, 1925, 1957, 2033]. $p(x)$ [762]. P_0 [1578]. P_1 [429, 875]. Q [2228, 1834]. qd [1173]. QR [560, 1291]. QZ [1661]. R [701]. R^2 [1964]. R^3 [1671]. R^d [849]. \Re [1239]. rp [1789]. S [994]. T [1021]. Θ [552, 1158, 1157, 1406, 1575, 1590, 2104]. V [2195]. φ [2187]. ϑ [1405]. $W(a, x)$ [1074]. $W^{-1,q}$ [351]. $W^{1,\infty}$ [752]. X [471, 1649, 2013]. $x^{(i+1)} = Px^{(i)} + q$ [148]. $XY = A$ [2251]. $y'' = f(t, y)$ [580, 581]. $y' = f(x, y)$ [660]. $y' = f(x, y)$ [661]. $y'' = f(x, y)$ [1184]. $y'' = f(x, y)$ [658, 659]. z [458, 1652, 1814]. z^{-1} [458, 1652, 1814]. Z_2 [1346]. $|\epsilon|$ [1]. $|L^2|$ [326].

-acceptability [1326]. **-algebraic** [485, 486]. **-algorithm** [2061]. **-approximation** [777, 1499]. **-approximations** [1406]. **-BEM** [325]. **-Bernstein** [1834]. **-boundedness** [1230, 1229]. **-bounds** [800]. **-condition** [1521]. **-conforming** [1541, 1005, 1200, 1497]. **-convergence** [752, 958, 1211]. **-Cycle** [2195]. **-decompositions** [647, 646, 1400]. **-dependent** [125]. **-elliptic** [1275, 739, 1199]. **-error** [802, 1062, 2060]. **-factorization** [745]. **-functions** [2187]. **-Galerkin** [1818]. **-Hessian** [1004]. **-hybrid** [808]. **-interior** [428]. **-Laplacian** [89, 275, 420, 762]. **-linear** [701]. **-matrices** [375, 2155]. **-matrix** [954, 1021, 1166]. **-method** [11]. **-methods** [1575, 1590, 2104, 552, 1158, 1157]. **-narrow** [749]. **-norm** [980, 607, 1147]. **-norms** [1925, 909]. **-order** [2228]. **-part** [746]. **-partitions** [191]. **-projection** [20, 55, 1042]. **-rational** [1069]. **-scheme** [1405]. **-series** [1187]. **-solutions** [1230, 2252]. **-spline** [1649, 2013]. **-splines** [471, 1778]. **-stability** [55, 661, 1042]. **-stable** [581, 580, 1343, 2125]. **-stochastic** [126]. **-structure** [316, 785, 1633]. **-symmetry** [1346]. **-transform** [675]. **-transformation** [1994]. **-triangulation** [1928]. **-type** [994, 745]. **-uniform** [1228]. **-uniformly** [1]. **-version** [1065, 1063, 1198, 1755, 1957]. **-virtual** [1736]. **-weighted** [1881].

1-type [340]. **17** [2031]. **1D** [425].

2 [290, 1630]. **2-sphere** [467]. **26** [108]. **2D** [425, 1152].

31 [2201]. **3D** [354, 425, 2087].

5 [581, 879].

65130 [658].

7 [815].

83d [1630]. **86d** [879]. **87c** [581].

9 [658]. **90d** [815]. **90i** [658]. **98d** [2031].

abcd [2222]. **Abel** [506, 1595, 1596]. **abscissa** [1681, 1682]. **absolute** [584, 1419, 1662, 2234, 2106]. **absorbing** [1017, 1628, 2143]. **abstract** [344, 691]. **Accelerated** [188, 586, 968, 1637]. **accelerating** [1307]. **Acceleration** [1495, 435, 436, 1310, 1324, 1662, 1663, 1850]. **accelerator** [881]. **acceptability** [1326]. **accretive** [369, 370]. **accumulation** [628]. **Accuracy** [1759, 167, 195, 292, 580, 581, 984, 1196, 1228, 1329, 1352, 1569, 1691, 1723, 2005]. **accuracy-enhancement** [292]. **Accurate** [741, 810, 9, 570, 917, 979, 1074, 1113, 1316, 1616, 1754, 1752, 1786, 2064, 2065, 2066, 2140, 2231, 2244]. **Accurately** [345]. **achieve** [770]. **acoustic** [207, 210, 299, 331, 384, 726, 1021, 1041, 1426, 1427, 1496, 1936]. **acoustics** [1746]. **activation** [1555]. **active** [349]. **Adams** [1194]. **Adams-type** [1194]. **adapted** [1565]. **Adapting** [608]. **Adaptive**

[57, 149, 271, 274, 279, 455, 513, 716, 715, 756, 905, 968, 973, 1129, 1417, 1506, 1784, 2059, 18, 59, 74, 87, 138, 141, 275, 278, 291, 323, 500, 529, 536, 582, 587, 672, 673, 718, 805, 847, 914, 928, 1024, 1025, 1028, 1043, 1044, 1100, 1101, 1261, 1264, 1279, 1362, 1370, 1455, 1456, 1482, 1483, 1558, 1617, 1699, 1995, 2189, 2205, 2250, 456].

adaptively [55, 875]. **adaptivity** [1109, 1626]. **addition** [961]. **additional** [330, 1738]. **Additive** [1204, 1957, 150, 422, 631, 1239, 1397, 1404, 1589, 1626, 1735, 2151, 2209, 2226].

additively [571]. **ADER** [2076]. **ADER-WAF** [2076]. **adhesion** [707, 1066]. **ADI** [1820]. **Adiabatic** [1342]. **adjoint** [374, 391, 649, 1513, 1647, 1970, 2040, 2142, 2138]. **adjoint-based** [649]. **advection** [1465]. **advection** [298, 446, 877, 896, 910, 1013, 1708, 1788, 2005, 2086, 2170].

advection-diffusion [1708, 1788]. **advection-diffusion-reaction** [446]. **advective** [1464]. **adverse** [373]. **Afem** [540]. **affine** [223, 1780]. **after** [699].

aggregated [2034]. **aggregation** [1954]. **aggregation-diffusion** [1954]. **aid** [1950]. **Ale** [1616, 1446]. **Ale-Fem** [1616]. **algebra** [1213, 2096]. **algebraic** [65, 222, 485, 486, 505, 550, 667, 1008, 1108, 1148, 1167, 1432, 1531, 1548, 1557, 1661, 1785, 1804, 1940, 1969, 1997, 1999, 2058].

algebraically [668]. **algorithm** [341, 378, 382, 401, 476, 477, 536, 547, 609, 616, 682, 704, 734, 787, 822, 902, 915, 926, 937, 951, 953, 982, 1055, 1095, 1111, 1164, 1218, 1270, 1290, 1291, 1301, 1312, 1428, 1475, 1555, 1636, 1660, 1727, 1738, 1826, 1854, 1860, 1943, 2061, 2117, 2124, 2162, 2168, 2184, 2192, 2211, 2229, 2246].

Algorithms [788, 1693, 1732, 2095, 82, 83, 112, 286, 295, 423, 521, 673, 727, 783, 856, 898, 900, 1025, 1047, 1076, 1129, 1143, 1167, 1173, 1357, 1398, 1399, 1495, 1504, 1570, 1694, 1705, 1877, 1880, 1916, 2001, 2015, 2033, 2079, 2087, 2179, 2191, 2187, 2220, 2227, 2228, 2240].

alignment [80]. **Allen** [44, 125, 126, 231, 349, 417, 587, 964, 1126].

allowing [1214]. **allows** [1092]. **alloy** [228, 229, 230, 352, 1418]. **alloys** [2224].

alpha [757]. **Alternate** [722, 1705, 1706].

alternating [338, 457, 583, 642, 641, 1090, 1904].

Ampère [164, 1775]. **Anal** [581, 658, 815, 879, 1630, 2031]. **analyses** [250, 566, 1204]. **Analysis** [30, 75, 138, 155, 361, 364, 400, 454, 468, 606, 591, 622, 699, 724, 830, 938, 962, 964, 963, 1032, 1084, 1153, 1193, 1203, 1241, 1300, 1410, 1501, 1562, 1573, 1609, 1614, 1832, 1901, 1907, 2076, 2201, 3, 4, 5, 8, 42, 49, 58, 68, 95, 115, 116, 118, 126, 133, 137, 179, 193, 196, 197, 201, 217, 220, 235, 256, 281, 290, 302, 309, 305, 312, 334, 347, 346, 349, 352, 367, 386, 418, 422, 424, 433, 462, 475, 496, 504, 506, 508, 528, 533, 544, 576, 597, 617, 621, 649, 662, 663, 694, 708, 727, 790, 797].

analysis [806, 807, 828, 825, 858, 865, 870, 872, 877, 887, 898, 897, 888, 894, 890, 895, 900, 913, 1905, 958, 970, 1013, 1021, 1039, 1041, 1048, 1049, 1073, 1075, 1122, 1148, 1150, 1152, 1200, 1238, 1248, 1255, 1256, 1258, 1264, 1277, 1297, 1296, 1293, 1306, 1339, 1346, 1345, 1357, 1366, 1367, 1368, 1372, 1425, 1426, 1427, 1441, 1448, 1454, 1455, 1473, 1509, 1497, 1510, 1522, 1537, 1536, 1551, 1549, 1585, 1586, 1595, 1613, 1617, 1615, 1622, 1641, 1647, 1675, 1678, 1697, 1737, 1742, 1770, 1773, 1778, 1782, 1789, 1811, 1847, 1856, 1877, 1897, 1898, 1927, 1931, 1970, 2024, 2054, 2068].

analysis [2142, 2153, 2134, 2156, 2143, 2152, 2195, 2192, 2188, 2191, 2197, 2212, 2219, 2221, 2233, 2247, 738, 740, 1318, 1319, 2111, 469].

analysis-suitable [621]. **Analytic** [2101, 22, 51, 76, 983, 1374, 1846, 1911].

analytical [12, 20, 222, 1159]. **Anderson**

[436, 1850]. **Anderson-type** [436]. **Andrew** [1141]. **angles** [283]. **Anisotropic** [120, 596, 128, 127, 223, 243, 245, 751, 782, 910, 920, 921, 1081, 1126, 1470, 1471, 1581, 1909, 2195, 2230]. **annulus** [458, 1652, 1814]. **antithetic** [213]. **any** [920]. **AOR** [2155]. **apertures** [1240]. **appearing** [759].

Application [609, 2208, 2, 72, 129, 254, 287, 365, 425, 498, 516, 549, 565, 582, 613, 775, 781, 928, 930, 1088, 1216, 1273, 1287, 1395, 1447, 1553, 1623, 1684, 1760, 1811, 2017, 2117].

Applications [1026, 116, 121, 145, 187, 191, 279, 457, 464, 601, 616, 632, 683, 1009, 1010, 1121, 1118, 1156, 1398, 1399, 1555, 1606, 1916, 2007, 2054, 2069, 2200, 2201]. **applied** [131, 190, 291, 292, 589, 588, 999, 1119, 1234, 1463, 1556, 1564, 1592, 1666, 1753, 1946, 2155]. **appraisal** [1813]. **approach** [74, 131, 289, 716, 797, 799, 876, 931, 1052, 1174, 1213, 1289, 1328, 1449, 1481, 1566, 1714, 1715, 1757, 1758, 1782, 1803, 1802, 1811, 1881, 2065, 2080, 2093, 2255, 710].

approximants [954, 1349]. **approximate** [226, 495, 598, 646, 763, 803, 883, 919, 1213, 1215, 1279, 1436, 1667]. **approximated** [623, 685]. **Approximating** [1161, 1567, 22, 733, 761, 1719, 1720, 1721, 1916, 747, 2040, 2066, 2187].

Approximation [117, 113, 299, 408, 418, 445, 835, 1136, 1192, 1191, 1235, 1253, 1354, 1449, 1703, 1982, 2203, 7, 18, 21, 32, 36, 33, 37, 49, 61, 70, 71, 85, 89, 119, 121, 143, 167, 180, 197, 200, 210, 214, 238, 240, 241, 242, 234, 228, 229, 230, 231, 227, 243, 249, 244, 232, 233, 247, 251, 253, 258, 256, 262, 270, 277, 307, 317, 369, 370, 366, 372, 381, 391, 399, 413, 421, 431, 437, 461, 463, 498, 499, 511, 525, 526, 538, 543, 549, 550, 551, 601, 614, 627, 629, 656, 664, 672, 680, 686, 695].

approximation [726, 767, 774, 776, 777, 785, 802, 831, 834, 833, 849, 854, 857, 866, 885, 891, 893, 908, 920, 936, 980, 981, 988, 1003, 1019, 1046, 1066, 1067, 1091, 1145, 1179, 1195, 1233, 1237, 1251, 1257, 1276, 1302, 1307, 1308, 1315, 1335, 1336, 1348, 1358, 1372, 1374, 1389, 1397, 1411, 1421, 1423, 1458, 1462, 1465, 1489, 1499, 1552, 1554, 1579, 1580, 1606, 1844, 1617, 1642, 1704, 1730, 1747, 1767, 1777, 1798, 1812, 1842, 1845, 1897, 1899, 1914, 1935, 1947, 1988, 2024, 2044, 2048, 2060, 2065, 2089, 2122, 2152, 2162, 2163, 2164, 2167, 2174, 2178, 2181, 2189, 2209, 2214].

approximations [9, 16, 17, 44, 53, 59, 72, 144, 165, 175, 245, 248, 246, 263, 417, 424, 450, 451, 497, 522, 572, 624, 644, 649, 658, 659, 676, 684, 714, 725, 741, 786, 881, 892, 889, 908, 927, 986, 1013, 1015, 1034, 1061, 1062, 1059, 1089, 1099, 1102, 1155, 1326, 1365, 1388, 1404, 1407, 1406, 1409, 1467, 1479, 1511, 1512, 1538, 1539, 1613, 1653, 1654, 1667, 1729, 1784, 1786, 1807, 1819, 1906, 1941, 1952, 1960, 1975, 1994, 2012, 2032, 2081, 2088, 2087, 2090, 2159, 2183, 2248, 2253, 742].

Arbitrarily [1958]. **Arbitrary** [782, 177, 753, 781, 944, 1000, 1093, 1235, 1518, 1587, 1602, 713]. **Arbitrary-order** [782, 781]. **arcs** [2213]. **arguments** [1770].

arising [45, 41, 342, 437, 496, 891, 956, 1104, 1148, 1182, 1274, 1288, 1429, 1557, 1819, 1870].

arithmetic [1280, 1790, 1791, 1988].

Arnold [526]. **Aronszajn** [928]. **artificial** [1102, 2052]. **aspects** [1949]. **asserting** [2117]. **assets** [1292]. **assimilation** [1312, 1542]. **associated** [82, 83, 93, 1166, 2221]. **assumptions** [1030, 2248]. **asymmetric** [1646].

asymmetry [2000]. **Asymptotic** [555, 845, 1067, 1672, 1801, 1973, 2141, 2181, 28, 79, 112, 552, 867, 868, 898, 1068, 1072, 1140, 1309, 1365, 1461, 1555, 1582, 1634, 2004, 2188]. **asymptotic-preserving** [867, 868, 1072]. **Asymptotically** [831].

asymptotics [754]. **asynchronous** [1702].

atom [50]. **atomistic** [1540, 2156].

atomistic-to-continuum [1540].

attenuation [1900]. **attracting** [1969].

attraction [1029]. **attractivity** [1955].
attractor [1250, 1253]. **Attractors**
 [1431, 1149, 1432]. **Augmented** [856, 977,
 1313, 2103, 84, 250, 504, 678, 773, 1124,
 1216, 1457, 1473, 1494, 1526, 1532, 1881].
auto [172, 1849]. **auto-correction** [1849].
auto-correlation [172]. **Automatic**
 [628, 1554, 495]. **autonomous** [620, 1375].
Auxiliary [739, 1856]. **Average**
 [1795, 71, 419]. **averages** [910, 1502].
averaging [685, 1812, 1943]. **averse** [274].
Avoiding [63, 64, 258]. **aware** [141].
axisymmetric [235, 302, 1037, 1782, 1783].

B [492, 918, 1091, 1391, 2094]. **B-series**
 [492]. **B-spline** [918, 1091, 1391, 2094].
back [871]. **Backward** [342, 360, 1598, 748,
 42, 75, 211, 574, 779, 991, 1441, 1447, 1570,
 1660, 1702, 1716, 1902, 2051, 2068].
Bakhvalov [1562]. **Bakhvalov-Shishkin**
 [1562]. **balance** [1047, 1410]. **ball** [1842].
Banach [143, 379, 545, 971, 1739, 2154].
band [678, 749]. **Banded** [1185]. **Barlow**
 [2218]. **barotropic** [1019]. **Barrett** [110].
barrier [1352, 1796]. **barycentric**
 [163, 549, 1247, 1349]. **Barzilai**
 [1311, 170, 721, 720, 1896]. **Basc** [988].
based
 [10, 111, 199, 353, 409, 427, 544, 562, 574, 609,
 623, 649, 685, 686, 714, 783, 864, 892, 906,
 912, 962, 982, 1051, 1070, 1132, 1183, 1190,
 1227, 1395, 1473, 1477, 1484, 1545, 1570,
 1656, 1657, 1662, 1698, 1699, 1705, 1706,
 1771, 1823, 1874, 1875, 1986, 2012, 2064,
 2080, 2084, 2112, 2157, 2147, 2218, 2236].
bases [73, 1484, 2075]. **basis** [184, 264, 470,
 519, 614, 690, 985, 986, 1014, 1021, 1340,
 1488, 1499, 1619, 1846, 1921, 2196, 2232].
batch [2221]. **bathymetry** [389]. **BDDC**
 [517, 2095]. **BDF** [44, 1035, 1328, 1559].
BDF-like [1328]. **BDF2** [1558]. **be** [286].
Beam [2084]. **beams** [1975]. **Bean** [888].
bed [630]. **behavior** [1387, 1856].
behaviour [542, 555, 556, 709, 845, 863,
 1000, 1582, 1801, 2207]. **Bellman**
 [1348, 1355, 1710]. **Bellman-type** [1710].
Beltrami [482]. **BEM** [10, 205, 325, 438,
 864, 931, 954, 955, 1725, 1726]. **bending**
 [257, 368, 1777]. **benefit** [1300]. **Bernstein**
 [1830, 1834]. **bespoke** [997]. **Bessel**
 [2201, 2200]. **Best**
 [1842, 1845, 2178, 270, 413, 431, 526, 908,
 980, 1580, 1653, 1654, 1812].
best-approximation-type [270]. **between**
 [79, 290, 460, 986, 1110, 2075]. **beyond**
 [799]. **Bézier** [680]. **BFGS** [155, 2229]. **bi**
 [882, 1009, 1010, 1136]. **bi-criteria** [882].
bi-Laplacian [1009, 1010]. **bi-variate**
 [1136]. **bicubic** [198]. **bidagonal**
 [1222, 1665]. **bidimensional** [1933]. **BIE**
 [932, 933]. **Bifurcation**
 [1551, 60, 768, 904, 1730, 1952].
Bifurcations [2030, 2031, 577, 1139].
biharmonic [406, 409, 428, 808, 1018, 1060,
 1070, 1171, 1524, 1619, 2209, 2238].
bilateral [217]. **bilayer** [257, 368]. **bilinear**
 [990]. **binary** [1418]. **biofilms** [728].
biomembranes [1037]. **Biot**
 [1545, 1532, 2242]. **biperiodic** [1362].
Birkhoff [21]. **bisection** [1042]. **bivariate**
 [1778, 2022]. **Black** [549, 1391, 2149, 1319].
Block [295, 1859, 72, 187, 365, 467, 681, 706,
 1905, 1006, 1116, 1128, 1216, 1222, 1249,
 1590, 1604, 1668, 2017, 2212].
Block-diagonal [1859, 681, 1006].
block-separable [1128]. **block-tridiagonal**
 [706]. **blocks** [39, 1665]. **Blow** [593, 973].
Blow-up [593, 973]. **bmo** [117]. **bodies**
 [386, 931]. **body** [707, 1259, 1983].
Bogdanov [334, 1346, 1345, 2193].
Boltzmann [981]. **Boor** [2211]. **bordered**
 [2212]. **borders** [1116]. **Borwein**
 [170, 721, 720, 1311, 1896]. **bound**
 [221, 228, 230, 409, 714, 902, 1059, 1131,
 1570, 1650, 1796, 1883, 1921, 1995].
bound-constrained [1131].
bound-preserving [221]. **boundaries**
 [597, 1354]. **Boundary**

[1281, 1320, 1485, 7, 12, 27, 63, 64, 66, 67, 91, 123, 131, 130, 140, 144, 162, 181, 191, 206, 207, 212, 237, 241, 246, 289, 291, 301, 312, 324, 331, 336, 337, 357, 359, 384, 397, 398, 400, 483, 490, 504, 534, 530, 539, 543, 554, 556, 568, 578, 579, 597, 609, 593, 619, 648, 652, 664, 676, 691, 750, 752, 755, 792, 809, 819, 872, 878, 893, 914, 928, 934, 943, 960, 1017, 1039, 1049, 1071, 1082, 1100, 1101, 1098, 1099, 1145, 1146, 1181, 1196, 1209, 1229, 1230, 1234, 1239, 1240, 1256, 1259]. **boundary** [1270, 1276, 1278, 1348, 1351, 1356, 1361, 1360, 1379, 1394, 1408, 1448, 1452, 1476, 1524, 1547, 1617, 1628, 1639, 1673, 1686, 1696, 1724, 1748, 1756, 1781, 1815, 1870, 1900, 1948, 2005, 2010, 2036, 2045, 2050, 2049, 2054, 2052, 2055, 2088, 2130, 2156, 2150, 2143, 2182, 2208, 1319]. **boundary-concentrated** [872]. **boundary-driven** [556]. **boundary-finite** [1281]. **boundary-locus** [191]. **boundary-value** [289, 400, 609, 1146, 1724]. **Bounded** [2003, 633, 903, 1887, 1911, 1973, 2024, 2237]. **Bounded-norm** [2003]. **boundedness** [1229, 1230, 1388]. **boundedness-by-entropy** [1388]. **Bounds** [1353, 32, 34, 36, 33, 37, 54, 139, 214, 215, 218, 314, 405, 604, 624, 750, 760, 786, 800, 803, 811, 1035, 1036, 1062, 1064, 1212, 1375, 1374, 1500, 1792, 1790, 1791, 1830, 1831, 1906, 1912, 1928, 1987, 2051, 2077, 2133, 2148, 2158, 2160]. **Boussinesq** [941, 1523, 1809]. **box** [929, 977, 1030, 1576, 1869, 1971]. **BPX** [621]. **Branch** [60, 499]. **branched** [706]. **breaking** [1345, 1730, 2193]. **bridge** [2153]. **Bridging** [1505]. **Brinkman** [69, 78, 138, 136, 545, 1005, 1378, 1736]. **Broken** [252, 464]. **Brownian** [522, 1267, 2153]. **Broyden** [1637, 2240]. **BSDEs** [1762]. **bubble** [990, 1106]. **Bulk** [66, 67, 874, 895]. **Bulk-surface** [66, 67, 874, 895]. **bundle** [1727]. **Burgers'** [1946, 1525, 1919]. **Burgers-like** [1525]. **Burniston** [76]. **Burniston-Siewert** [76]. **Cahn** [231, 44, 49, 125, 126, 149, 349, 417, 603, 587, 776, 784, 964, 1126, 1127, 1179, 1209, 1425, 1489, 1536, 1696, 1756]. **Cahn/Cahn** [231]. **calculating** [982]. **calculation** [339, 372, 674, 1138, 1593]. **calculations** [1537]. **calculus** [625, 1926]. **Call** [96]. **Camassa** [2159]. **can** [286]. **Canham** [1125]. **canonical** [93]. **capillarity** [520]. **capillary** [283, 427]. **capturing** [1919]. **Caputo** [2045]. **Carathéodory** [884, 885, 1855]. **cardiac** [77]. **cardinality** [540]. **Carlo** [213, 683, 1075, 1076, 1093, 1416, 1478, 1504, 1624, 1840]. **Cartan** [632]. **cartoon** [890]. **case** [50, 373, 703, 799, 928, 933, 932, 1276, 1829, 1867, 1869]. **Cauchy** [154, 344, 662, 696, 1493, 1835, 1853]. **Cauchy-type** [696]. **cavity** [974]. **cell** [71, 547, 920, 1032, 1066, 1178, 1232]. **cell-average** [71]. **cell-centred** [547, 920, 1232]. **cells** [3]. **centered** [905]. **central** [459, 1514, 1707]. **central-difference** [1707]. **central-upwind** [459]. **centre** [1381]. **Centred** [2085, 547, 608, 920, 1212, 1232]. **certain** [688, 791, 898, 1090, 1274, 1429, 1831, 2190]. **certified** [912]. **CG** [1796, 2220]. **chain** [1504, 1798, 2156]. **chains** [340, 1492]. **Change** [840, 1338, 771, 847, 1903, 2213, 2239]. **changes** [864]. **changing** [995]. **channel** [1403]. **chaos** [2081]. **Characteristic** [386, 123, 416]. **charge** [3]. **Cheap** [1466]. **chebfuns** [1810]. **Chebyshev** [61, 321, 322, 413, 925, 1123, 1403, 1510, 1525, 1653, 1712, 1747, 1830, 2004, 2029, 2028, 2112, 2140, 2165, 2167, 2178]. **chemotaxis** [1930]. **choice** [698, 1371, 1896]. **Cholesky** [566, 2037, 2239]. **choosing** [358, 1503]. **Chordal** [979]. **Christoffel** [753]. **CIP** [2188, 273]. **CIP-stabilized** [273]. **circle** [473, 682, 1105]. **circular** [974, 1652]. **claims** [2255, 778]. **class**

[7, 155, 187, 453, 454, 468, 469, 510, 529, 579, 660, 907, 950, 970, 1058, 1071, 1167, 1182, 1183, 1233, 1269, 1390, 1413, 1414, 1529, 1644, 1719, 1765, 1891, 1916, 1940, 1970, 1996, 2005, 2082, 2101, 2147, 2105]. **classes** [18, 1267]. **classical** [152, 164]. **classification** [1974]. **Clement** [129]. **Clement-type** [129]. **Clenshaw** [804, 2201, 19, 2200]. **close** [690, 1516]. **close-to-touching** [690, 1516]. **Closed** [1260, 244, 341, 1091, 1944]. **Closed-form** [1260]. **closest** [915]. **Closing** [460]. **closure** [112]. **clustering** [1452]. **coagulation** [13]. **coagulation-fragmentation** [13]. **coarse** [374, 875]. **codes** [562, 1193, 1981]. **codimension** [751]. **coefficient** [551, 657, 1157, 1373, 1372, 1394, 1409, 1749, 1760, 1845, 1938, 2170]. **coefficients** [117, 372, 585, 590, 618, 758, 871, 985, 1085, 1298, 1317, 1374, 1384, 1383, 1416, 1655, 1712, 1734, 1767, 1836, 1895, 2081, 2140, 2152, 2146, 2230, 2247, 739]. **coercivity** [206]. **collection** [1983]. **Collective** [1671]. **Collocation** [56, 1420, 1548, 2072, 28, 158, 304, 336, 338, 348, 438, 449, 448, 452, 454, 600, 696, 791, 821, 1023, 1067, 1108, 1120, 1153, 1182, 1234, 1380, 1391, 1403, 1469, 1507, 1510, 1525, 1549, 1605, 1632, 1701, 1725, 1726, 1820, 2016, 2029, 2028, 2067, 2125, 2150, 2181, 2182, 1206]. **collocation-type** [1469]. **combination** [1123, 1901]. **combinations** [1114]. **combinatorial** [1785]. **combined** [384, 539, 2124]. **committed** [2114]. **commutator** [347, 346]. **commutator-free** [347, 346]. **commuting** [908, 2056]. **Compact** [464, 1040, 775, 1015, 2026, 2222]. **compactly** [614]. **Compactness** [1412]. **companion** [748]. **compared** [1396]. **Comparison** [269, 533, 76, 218, 508, 528, 1016]. **Comparisons** [986, 1983]. **compatible** [364, 831, 974]. **compensate** [608]. **complement** [1081, 2017]. **complementarity** [185, 2158, 2157]. **complementary** [2073]. **complete** [380, 2116]. **completely** [709, 2207]. **completion** [52, 583]. **Complex** [153, 1324, 132, 295, 375, 753, 781, 873, 983, 984, 1070, 1167, 1341, 1646, 1653, 1791, 1951, 2140, 2165]. **complexes** [918]. **Complexity** [1058, 1132, 1631, 536, 703, 718, 1124, 1137, 1796, 2220]. **component** [228, 229, 230, 352, 2153]. **Componentwise** [2158, 617, 1925]. **composed** [286]. **Composite** [1844, 403, 680, 2184, 2205]. **composition** [820]. **compound** [789, 1435]. **compressible** [359, 1019, 1087, 1232, 1411, 1476, 1543, 1603, 1634, 1833]. **compressible-gas** [1087]. **Compressive** [2150]. **Computable** [34, 33, 37, 139, 1234, 1500, 2148, 32, 2121]. **Computation** [1381, 1681, 1682, 1731, 1855, 2034, 8, 39, 333, 395, 413, 568, 822, 896, 904, 1074, 1311, 1472, 1473, 1502, 1605, 1623, 1693, 1744, 1821, 1824, 2091, 2094, 2140]. **Computational** [604, 768, 1847]. **Computations** [1223, 718, 1624, 1640]. **compute** [1041]. **computed** [760, 863]. **computer** [1192, 1191]. **computerized** [1854]. **computers** [1790]. **Computing** [192, 416, 415, 846, 1246, 1363, 1918, 2061, 2062, 2234, 2249, 94, 345, 578, 650, 690, 937, 1014, 1218, 1661, 1683, 1800, 1977, 1993, 2206]. **concentrated** [872]. **concentration** [229]. **concentration-dependent** [229]. **concerning** [1814]. **condition** [82, 83, 181, 212, 241, 260, 284, 285, 291, 320, 419, 617, 934, 968, 972, 1049, 1156, 1227, 1521, 1570, 2052, 2156, 2187, 2239, 1319]. **conditional** [846]. **conditioned** [172, 1080, 2054]. **conditioning** [148, 975, 1917]. **Conditions** [1864, 66, 67, 123, 144, 207, 268, 312, 359, 384, 472, 504, 539, 554, 660, 676, 809, 819, 924, 943, 950, 960, 1017, 1145, 1172, 1209, 1229, 1230, 1256, 1348, 1351, 1356, 1448, 1480, 1524, 1544, 1628, 1696, 1756, 1815,

2005, 2022, 2036, 2104, 2150, 2143, 2176]. **conducting** [386]. **conduction** [32]. **conductivity** [855, 1516]. **configuration** [1434]. **conformal** [559, 883, 1016, 1436, 1477, 1510]. **Conforming** [514, 1176, 1403, 1527, 2137, 128, 439, 475, 546, 877, 1005, 1006, 1050, 1177, 1200, 1497, 1541, 1556, 1770, 1774]. **conical** [254]. **conjecture** [1814]. **Conjugate** [1646, 183, 882, 1187, 1341, 1880, 2000, 2124, 2235]. **conjugate-gradient** [1341]. **conjugation** [1351]. **connected** [1436, 1701]. **connecting** [333, 1731]. **conquer** [1655]. **Conservation** [655, 26, 141, 399, 558, 573, 637, 673, 997, 1054, 1188, 1229, 1230, 1238, 1279, 1412, 1438, 1439, 1691, 1697, 1924, 1967, 1987, 2020, 2085, 2231]. **Conservative** [502, 1930, 1942, 298, 1110, 1871, 1872, 1890]. **conserving** [607, 800, 1107]. **Consistency** [1476, 2024, 927, 1970, 2086]. **Consistent** [866, 798, 1231, 2238]. **consolidation** [1545, 1947]. **Constant** [36, 799, 1347, 2083, 2214]. **constants** [431, 1182, 2071, 2120]. **constituted** [2048]. **Constrained** [2205, 2, 57, 116, 170, 254, 259, 287, 413, 595, 612, 702, 902, 977, 988, 1131, 1151, 1175, 1428, 1560, 1576, 1738, 1761, 1796, 1953, 1968, 2039]. **Constraining** [1440]. **constraint** [1289, 1369, 1883]. **constraints** [257, 256, 274, 429, 536, 538, 714, 735, 1227, 1660, 1845]. **constricted** [1403]. **Constructing** [1825, 1732]. **Construction** [1088, 1309, 1477, 913, 1110, 1215, 1375, 2180, 2210]. **Constructive** [1346, 181]. **contact** [31, 118, 217, 283, 290, 623, 750, 792, 2132, 2137]. **context** [1636, 1985]. **contingent** [2255, 778]. **continuation** [844, 998, 1068, 1301, 1848, 1977]. **continued** [706]. **Continuous** [65, 219, 939, 1929, 2012, 35, 479, 517, 889, 1000, 1036, 1358, 1375, 1490, 1580, 1890, 2083, 2162]. **continuous-in-time** [889]. **continuum** [1540, 1798]. **Contour** [983, 2172]. **contours** [377]. **contraction** [1721]. **contractive** [1850]. **contrast** [480]. **control** [54, 115, 114, 131, 142, 187, 429, 434, 435, 495, 531, 538, 543, 595, 852, 874, 903, 1064, 1068, 1100, 1101, 1098, 1174, 1188, 1369, 1479, 1798, 1808, 1832, 1869, 1873, 1878, 1960]. **control-state** [595]. **controlled** [293, 1192, 1191]. **controls** [903]. **Convection** [387, 388, 165, 171, 194, 222, 292, 297, 440, 498, 513, 535, 546, 556, 611, 606, 594, 641, 685, 741, 772, 802, 854, 869, 944, 1032, 1036, 1059, 1163, 1170, 1409, 1415, 1433, 1522, 1562, 1564, 1577, 1593, 1601, 1600, 1617, 1616, 1640, 1689, 1741, 1743, 1784, 1945, 1991, 2142, 2145, 2176, 2197, 2250, 710, 273, 742, 2050]. **convection-diffusion** [165, 222, 292, 440, 498, 513, 546, 556, 606, 772, 854, 944, 1032, 1059, 1170, 1409, 1415, 1562, 1564, 1601, 1600, 1617, 1616, 1640, 1689, 1741, 1945, 1991, 2142, 2176, 2197, 742]. **convection-diffusion-reaction** [685]. **Convection-diffusion-type** [2050]. **convection-dominated** [194, 1163, 1522]. **convective** [542]. **converge** [1846]. **Convergence** [5, 12, 25, 51, 180, 190, 227, 323, 347, 346, 355, 354, 438, 465, 520, 529, 557, 673, 683, 719, 718, 728, 805, 823, 828, 851, 937, 970, 1013, 1020, 1021, 1028, 1043, 1053, 1178, 1208, 1266, 1297, 1306, 1355, 1384, 1383, 1394, 1426, 1465, 1474, 1486, 1570, 1600, 1603, 1756, 1770, 1840, 1856, 1874, 1935, 1974, 2081, 2155, 2154, 2170, 2183, 2184, 2195, 2192, 2191, 2197, 2211, 2237, 2247, 2111, 47, 68, 82, 83, 84, 95, 148, 170, 178, 185, 194, 208, 263, 271, 278, 326, 350, 392, 393, 394, 417, 435, 451, 474, 564, 563, 569]. **convergence** [576, 589, 586, 587, 615, 684, 696, 701, 721, 752, 762, 784, 790, 797, 807, 827, 825, 883, 886, 936, 950, 958, 959, 971, 972, 1025, 1056, 1078, 1079, 1150, 1152, 1179, 1204, 1211, 1220, 1229, 1230, 1250, 1267, 1291, 1301, 1292, 1307, 1324,

1340, 1354, 1356, 1358, 1382, 1439, 1455, 1467, 1475, 1476, 1483, 1538, 1539, 1543, 1518, 1544, 1535, 1560, 1585, 1617, 1615, 1614, 1627, 1637, 1662, 1686, 1685, 1700, 1729, 1753, 1764, 1769, 1841, 1851, 1864, 1862, 1866, 1868, 1879, 1880, 1903, 1924, 1952, 1958, 1959, 1965, 1964, 1972, 1995, 2013, 2077, 2079, 2082, 2142, 2151].

convergence [2139, 2143, 2175, 2194, 2227, 2228, 2230, 2235, 1319, 1875]. **Convergent** [1099, 1272, 1414, 1516, 1750, 2001, 199, 202, 259, 341, 368, 573, 609, 641, 649, 957, 966, 1044, 1055, 1100, 1101, 1265, 1270, 1370, 1411, 1618, 1688, 1695, 1696, 1760, 1833, 2055].

Conversion [2075]. **convex** [2, 155, 280, 343, 529, 536, 764, 1007, 1094, 1217, 1216, 1428, 1555, 1797, 2016].

Convexity [1393, 771].

Convexity-preserving [1393].

Convolution [568, 1180, 206, 207, 565, 916, 1181, 1189, 1583, 1594, 1595, 1725, 1726, 1894].

convolution-space [1725, 1726]. **Cook** [1489]. **coordinate** [365, 1829]. **coordinates** [1722, 2034]. **corank** [60]. **corank-** [60]. **corner** [208, 1226, 1601]. **corotational** [249]. **Corrected** [1644, 1377]. **correcting** [704]. **Correction** [111, 397, 868, 1875, 222, 225, 483, 930, 1174, 1232, 1849]. **corrections** [403, 1822]. **corrector** [871, 2106, 2110, 2108, 2109]. **Correlation** [52, 172, 378, 1246, 1881, 2234].

corresponding [978, 1419]. **Corrigendum** [232, 369, 456, 581, 815, 1101, 1538, 1757].

CORSING [446]. **Cosine** [2213, 515, 658, 659]. **cost** [455, 456]. **Cotes** [1517, 2190]. **counterexample** [1159].

counterpart [198]. **Coupled** [1920, 26, 58, 122, 140, 310, 311, 404, 602, 691, 874, 895, 922, 967, 1051, 1281, 1426, 1565, 1584, 1618, 1784, 1897, 1902, 1945, 2119, 2243].

Coupling [530, 10, 62, 69, 79, 291, 438, 490, 534, 548, 793, 794, 931, 955, 969, 1050, 1052, 1427, 1540, 1648, 1684, 1746, 1927].

couplings [648]. **covariance** [699, 1449].

covariant [757]. **Cox** [53, 684]. **CQ** [205]. **CQ-BEM** [205]. **crack** [567]. **cracks** [277].

Craig [2197]. **Crank** [717, 1114, 1368, 1608, 1903, 2208].

Crank-Gupta [717]. **criss** [476].

criss-cross [476]. **criteria** [358, 882, 1503, 1702]. **criterion** [267].

critical [775, 894, 2100]. **critical-state** [894]. **criticality** [1624]. **cross** [330, 386, 476, 509, 728, 981, 1388].

cross-diffusion [330, 509, 728, 1388].

cross-section [386]. **Crouzeix** [197, 1456, 1561]. **crystal** [1558, 1559, 1695].

crystals [1625]. **Cubature** [2113, 294, 978, 1088, 1620]. **Cubic** [1649, 46, 181, 198, 279, 518, 536, 680, 727, 979, 1211, 1420, 1638, 1822, 1876, 2010, 2013, 2023].

curl [168, 575, 591, 636, 1275, 1286, 1551, 739].

curl-curl [636]. **current** [10, 302, 301, 386, 686, 780, 888, 1904, 1914, 2011]. **curse** [2153]. **Curtis** [2200, 2201, 19, 804].

curvature [246, 235, 341, 625, 700, 866, 892, 923, 964, 1003, 1465, 1780]. **Curve** [666, 247, 680, 750, 751, 892, 1794]. **curved** [237, 241, 792, 1235, 1922, 1927].

curves [151, 244, 251, 253, 258, 254, 381, 906, 945, 947, 1944]. **curvilinear** [657]. **cusps** [2027].

cut [482, 483, 1487]. **Cycle** [2195]. **cyclic** [720, 1829]. **cylinder** [1074]. **cylindrical** [1480].

D [88, 276, 390, 535, 557, 618, 641, 894, 1316, 1442, 1496, 1615, 1643]. **dam** [2073].

damage [1920]. **damped** [1491, 1882].

damping [2208]. **Darboux** [753].

Darboux-type [753]. **Darcy** [58, 62, 69, 169, 310, 311, 426, 427, 602, 603, 759, 793, 794, 1051, 1202, 1506, 1648, 1684, 2243].

Data [695, 860, 27, 71, 154, 237, 271, 301, 342, 413, 535, 682, 732, 765, 764, 770, 771, 795, 835, 945, 974, 980, 1135, 1278, 1290, 1312, 1367, 1476, 1542, 1606, 1621, 1664, 1806, 2059, 2167, 2196, 2197, 2203].

data-reduction [1606]. **DDFV** [88, 401].
decaying [1104]. **decomposable** [1837].
decomposing [890]. **decomposition**
 [147, 318, 332, 386, 547, 632, 715, 916, 962,
 1046, 1070, 1082, 1097, 1136, 1137, 1163,
 1204, 1602, 2033, 2088, 2147, 2215].
decompositions [331, 419, 647, 646, 810,
 1014, 1288, 1400, 2038, 2232]. **decoupled**
 [202, 521, 603]. **Decoupling** [1665].
Dedication [1337]. **Deep**
 [1145, 389, 1396, 1762]. **defect**
 [403, 930, 225]. **deferred** [930, 1174].
deficient [284]. **definite**
 [467, 1197, 1655, 1827, 1865, 1982].
definiteness [267]. **definition** [625].
defocusing [6]. **deformations** [367, 368].
Degasperis [650]. **Degenerate**
 [1355, 14, 200, 508, 529, 728, 998, 1063, 1118,
 1314, 1409, 2011, 2126, 2145].
degenerate-singular [728]. **degree**
 [517, 606, 1393]. **degrees** [195]. **Delay**
 [1158, 190, 192, 213, 282, 416, 461, 692, 1160,
 1159, 1283, 1575, 1832, 1943, 2104, 2192,
 2233, 1318, 2110].
delay-integro-differential [2233]. **delays**
 [452, 454, 1283, 1295, 2083]. **delta** [182].
Delves [76]. **Delves-Lyness** [76].
denominator [764]. **density**
 [544, 586, 888, 1012]. **depend** [2077].
dependent
 [10, 39, 125, 206, 207, 211, 220, 229, 308, 312,
 447, 641, 708, 741, 794, 860, 864, 1034, 1158,
 1219, 1243, 1257, 1282, 1356, 1372, 1407, 1434,
 1443, 1608, 1692, 1895, 2039, 2145, 740, 2129].
derivation [1444]. **Derivative**
 [570, 613, 665, 766, 986, 1112, 1529, 1836,
 1911, 2045, 2241]. **Derivative-free**
 [570, 613, 665, 1529]. **derivatives**
 [377, 850, 1711, 1718, 1861, 2061, 2062, 2094,
 2148, 2214]. **derived** [1396, 1676]. **Descent**
 [47, 365, 700, 701, 716, 736, 1041, 1150, 1357,
 1829, 1761, 2235]. **describing** [315]. **Design**
 [825, 1455, 2066, 1063, 2065]. **determinants**
 [1327, 2101]. **Determination**
 [1123, 172, 766, 1113, 1254]. **deterministic**
 [652, 1058, 1582]. **DeTurck** [892].
Developments [1861, 1095, 1789].
Devising [646, 648, 647]. **dewetting** [2245].
DG [1230, 591, 870, 1177, 1200, 1463, 1464,
 1569, 1886, 2243, 2242, 2250, 739]. **DGFEM**
 [1966, 1964, 2177]. **diagonal**
 [681, 1006, 1859]. **diagonalization** [2056].
diagonally [505, 1984]. **Difference**
 [14, 7, 13, 46, 42, 132, 216, 289, 357, 360, 361,
 437, 548, 578, 579, 641, 676, 677, 697, 779,
 809, 878, 926, 950, 982, 984, 1196, 1265, 1266,
 1284, 1329, 1352, 1384, 1383, 1409, 1412,
 1437, 1438, 1447, 1480, 1564, 1598, 1617,
 1615, 1614, 1663, 1676, 1679, 1691, 1707, 1722,
 1751, 1901, 1967, 1987, 2044, 2045, 2047, 2055,
 2126, 2128, 2170, 2207, 2223, 2222, 2224].
difference-type [2207]. **differences**
 [497, 695, 1040]. **different** [2075].
differentiability [420, 924]. **differentiable**
 [1113, 1836]. **differential**
 [1, 65, 121, 174, 192, 200, 225, 282, 373, 416,
 460, 461, 487, 505, 515, 522, 541, 569, 574,
 604, 715, 862, 879, 880, 886, 895, 889, 905,
 911, 912, 918, 989, 992, 1004, 1023, 1077, 1110,
 1139, 1148, 1149, 1158, 1189, 1194, 1241, 1267,
 1275, 1287, 1283, 1304, 1314, 1323, 1343, 1359,
 1375, 1422, 1423, 1432, 1431, 1460, 1490, 1546,
 1538, 1539, 1544, 1548, 1563, 1575, 1579, 1598,
 1611, 1629, 1630, 1632, 1661, 1670, 1703, 1716,
 1735, 1754, 1767, 1769, 1785, 1804, 1817, 1818,
 1820, 1855, 1898, 1899, 1907, 1929, 1969, 1989,
 2034, 2042, 2067, 2068, 2083, 2096, 2104].
differential
 [2178, 2180, 2233, 2254, 1318, 2115].
differential-algebraic [65, 505, 1785, 1804].
differential-functional [2254].
differentiation [211, 360, 506, 991, 1185,
 1334, 1424, 2186, 2210]. **diffuse** [896, 1718].
diffusion
 [23, 90, 132, 165, 171, 194, 208, 222, 262, 292,
 298, 330, 360, 372, 404, 415, 440, 446, 498,
 508, 509, 513, 535, 546, 551, 553, 557, 555,
 556, 606, 594, 642, 641, 644, 685, 728, 741,

772, 782, 802, 831, 848, 854, 865, 869, 873, 877, 896, 899, 910, 920, 921, 944, 955, 1002, 1032, 1059, 1139, 1170, 1183, 1305, 1364, 1373, 1366, 1372, 1388, 1409, 1415, 1433, 1442, 1443, 1463, 1471, 1522, 1562, 1564, 1565, 1568, 1577, 1582, 1601, 1600, 1617, 1614, 1616, 1618, 1640, 1689, 1685, 1708, 1741, 1743, 1751, 1753, 1755].

diffusion [1788, 1841, 1858, 1867, 1941, 1945, 1954, 1962, 1991, 2046, 2050, 2049, 2086, 2103, 2142, 2145, 2150, 2176, 2192, 2197, 2248, 2250, 778, 273, 742].

diffusion-uniform [1463]. **diffusions** [17, 1261, 1811]. **diffusive** [425, 475, 1582].

diffusivity [910]. **digital** [783, 1092]. **digits** [1790, 2098]. **dilute** [249]. **Dimension** [1205, 222, 607, 725, 920, 1040, 1226, 1689, 1692, 1816, 2044]. **dimension-splitting** [1226]. **dimensional** [41, 71, 119, 152, 181, 264, 326, 385, 401, 407, 422, 426, 425, 437, 448, 553, 633, 635, 656, 913, 928, 932, 1000, 1032, 1041, 1145, 1162, 1220, 1231, 1240, 1351, 1364, 1401, 1424, 1498, 1514, 1531, 1551, 1569, 1610, 1614, 1616, 1669, 1725, 1726, 1767, 1807, 1867, 1897, 1974, 1987, 2001, 2042, 2134, 2150, 2197, 2198, 2199, 2246, 1191].

dimensionality [2153]. **dimensionally** [34].

dimensions [14, 70, 135, 173, 214, 266, 355, 683, 914, 953, 1176, 1195, 1285, 1522, 1568, 1587, 1623, 1705, 1706, 1860, 2052, 2088].

diminishing [1186, 1188]. **diodes** [38].

Dirac [215, 535, 1808, 1825, 2223]. **Direct** [679, 904, 705, 1138, 1215, 1462]. **direction** [338, 583, 642, 641]. **directional** [375].

directions [1113]. **Dirichlet** [1101, 16, 197, 203, 539, 933, 942, 1100, 1098, 1647, 1714, 1815, 1922].

Dirichlet-to-Neumann [203]. **disc** [1207].

discontinuities [488, 489]. **discontinuity** [141]. **Discontinuous** [328, 450, 664, 960, 1060, 1276, 1625, 2135, 29, 36, 121, 125, 126, 149, 179, 210, 250, 426, 427, 439, 482, 490, 513, 517, 524, 531, 607, 589, 590, 636, 637, 648, 650, 663, 685, 785, 802, 806, 869, 875, 910, 964, 1056, 1065, 1063, 1061, 1059, 1147, 1178, 1275, 1277, 1278, 1298, 1382, 1404, 1409, 1412, 1425, 1454, 1468, 1486, 1506, 1530, 1573, 1611, 1643, 1692, 1691, 1746, 1749, 1753, 1755, 1924, 1931, 2014, 2157, 2226, 2236, 739, 738].

discovered [1173]. **discrepancy** [1371].

Discrete [61, 112, 147, 288, 498, 751, 940, 952, 1376, 1408, 1508, 2164, 4, 14, 44, 88, 90, 119, 160, 158, 205, 211, 260, 270, 313, 329, 364, 391, 413, 459, 506, 607, 619, 656, 752, 776, 781, 790, 795, 820, 855, 918, 930, 939, 974, 980, 1110, 1190, 1219, 1266, 1312, 1364, 1388, 1406, 1430, 1465, 1514, 1515, 1551, 1628, 1673, 1725, 1726, 1866, 1959, 1972, 1991, 2012, 2048, 2057, 2066, 2090, 2221, 2231, 742].

discrete-time [930]. **Discretising** [68].

Discretization [30, 404, 921, 1125, 1668, 1716, 1741, 1985, 23, 46, 58, 78, 88, 112, 199, 203, 263, 293, 310, 309, 305, 311, 315, 316, 418, 426, 427, 425, 430, 440, 532, 709, 797, 811, 830, 831, 851, 862, 867, 868, 891, 965, 1047, 1139, 1146, 1149, 1221, 1314, 1316, 1322, 1328, 1386, 1387, 1432, 1431, 1447, 1455, 1542, 1589, 1597, 1598, 1615, 1670, 1674, 1677, 1688, 1700, 1751, 1757, 1758, 1762, 1783, 1797, 1832, 1841, 1873, 1874, 1875, 1920, 1926, 1973, 1986, 2011, 2151, 2146, 710].

Discretizations [2095, 6, 29, 86, 145, 257, 270, 385, 433, 535, 539, 576, 575, 909, 994, 1037, 1078, 1097, 1126, 1250, 1255, 1258, 1275, 1305, 1433, 1446, 1457, 1566, 1622, 1666, 2035, 2119, 2226, 739, 740, 1319, 2115].

discretized [51, 466, 496, 1029, 1109].

Discretizing [577, 626]. **discs** [690]. **disk** [294]. **dispersion** [1342].

dispersion-managed [1342]. **dispersive** [361, 1195, 1486]. **Displacement** [1273, 759].

dissimilar [2018]. **dissipation** [459].

dissipative [1204, 1284, 1304, 1451].

Dissipativity [1295]. **dissolving** [1289].

distance [1925, 2169]. **distributed** [187].

distribution [978, 1044, 2098]. **div**

[994, 1005, 1541, 1858]. **Divergence** [475, 1001, 88, 169, 219, 948, 1006, 1036, 1176, 1541, 1543, 1809, 1913, 2232]. **Divergence-conforming** [475, 1006]. **divergence-free** [219, 948, 1036, 1176, 1541, 1543, 1809, 1913, 2232]. **Divergence-preserving** [1001]. **diverse** [1983]. **divide** [1655]. **divide-and-conquer** [1655]. **Divided** [1691, 695]. **do** [1846, 2056]. **do-one-then-do-the-other** [2056]. **Domain** [1097, 2033, 2088, 15, 137, 147, 203, 318, 332, 473, 547, 715, 792, 795, 865, 931, 962, 1031, 1046, 1082, 1181, 1204, 1288, 1486, 1524, 1518, 1600, 1602, 1614, 1724, 1763, 1971, 1973, 2024, 2215, 2223, 2237]. **domains** [34, 37, 128, 129, 131, 169, 168, 177, 208, 277, 442, 597, 615, 873, 889, 941, 1017, 1029, 1206, 1347, 1363, 1436, 1602, 1844, 1701, 1704, 1725, 1726, 1783, 1821, 1887, 1913, 1922, 2175, 2246, 2129]. **dominated** [194, 1163, 1522, 1784]. **Donaldson** [1910]. **Doppler** [1636]. **double** [405, 475, 1269, 1477, 1777]. **double-diffusive** [475]. **double-well** [1777]. **doubling** [904, 1167]. **doubly** [1701]. **Douglas** [584, 1866]. **downdating** [1937]. **DPG** [1011]. **drift** [372, 508, 557, 555, 1047, 1749, 1764]. **drift-diffusion** [508, 557, 555]. **drift-flux** [1047]. **drifts** [605]. **driven** [522, 540, 556, 1267, 1438, 1579]. **drops** [1223]. **drying** [425]. **DtN** [1362, 2143]. **DtN-type** [2143]. **Dual** [2087, 349, 951, 1484, 1776, 1881]. **Dual-primal** [2087]. **duality** [88, 90, 1110]. **due** [1226]. **dumbbell** [249]. **Dynamic** [31, 66, 67, 279, 424, 520, 651, 1209, 1256, 1448, 1490, 1696, 1756, 1920, 1947]. **dynamical** [333, 577, 1295]. **Dynamics** [6, 215, 466, 632, 929, 936, 1087, 1323, 1324, 1434, 1502, 2097].

E-based [10]. **EBT** [1178]. **Eckhoff** [1849]. **eddy** [10, 302, 301, 686, 780, 1904, 1914, 2011]. **edge** [134, 1362, 1577, 1581, 1966, 2087, 711]. **edged** [1922]. **edges** [128]. **Editorial** [103, 839, 2074, 1740]. **Editorship** [840, 1338]. **educational** [634]. **effect** [498, 612, 922, 2225]. **effective** [847, 935, 1800]. **Effects** [689, 114, 1379, 2000]. **Efficiency** [1086, 351, 1025]. **Efficient** [372, 900, 1237, 1395, 1472, 1498, 1979, 1980, 2052, 734, 1066, 1076, 1164, 2014, 2041]. **efficiently** [1041]. **eigenement** [1467]. **eigenpairs** [339]. **eigenproblems** [1826]. **eigenstructure** [1551]. **eigensystems** [2061]. **Eigenvalue** [15, 405, 693, 85, 277, 319, 332, 353, 355, 354, 444, 467, 510, 592, 627, 631, 858, 999, 1028, 1038, 1055, 1075, 1076, 1195, 1365, 1398, 1399, 1453, 1498, 1554, 1678, 1683, 1681, 1682, 1690, 1728, 1848, 2058, 2138, 2160, 2189, 2198, 2204]. **eigenvalues** [94, 391, 395, 415, 578, 718, 760, 1018, 1363, 1453, 1605, 1683, 1773, 1899, 2062]. **eigenvectors** [2062]. **eikonal** [927]. **Elastic** [1867, 217, 251, 253, 254, 366, 526, 567, 707, 962, 1628]. **elasticae** [1959]. **Elasticity** [1096, 359, 524, 528, 646, 949, 1006, 1106, 1484, 1578, 1737, 2156, 2177, 2199]. **elasto** [1746]. **elasto-acoustics** [1746]. **elastoacoustic** [137]. **elastodynamics** [114, 121, 1073]. **elastoplastic** [303]. **electric** [325, 888]. **electrical** [404, 1370]. **electrically** [386]. **electroless** [1084]. **electrolytes** [201]. **Electromagnetic** [1361, 1195]. **electron** [1434]. **electronic** [1537]. **electrophysiology** [77]. **electrostatic** [690]. **Element** [726, 1355, 16, 18, 32, 36, 33, 37, 43, 44, 55, 59, 57, 62, 69, 77, 85, 86, 92, 120, 122, 123, 128, 127, 134, 133, 139, 140, 146, 165, 166, 167, 169, 168, 171, 180, 199, 212, 214, 218, 219, 221, 237, 238, 239, 240, 241, 225, 224, 242, 234, 228, 229, 230, 231, 227, 248, 232, 233, 235, 262, 270, 275, 276, 277, 291, 293, 300,

302, 307, 306, 310, 309, 317, 320, 324, 328, 335, 341, 354, 366, 390, 403, 404, 409, 424, 429, 439, 481, 483, 488, 489, 490, 493, 514].

element
[512, 522, 534, 528, 533, 531, 532, 568, 576, 575, 585, 610, 596, 592, 615, 616, 622, 629, 648, 664, 697, 718, 750, 749, 758, 759, 762, 776, 784, 786, 805, 823, 826, 836, 854, 855, 865, 869, 875, 891, 893, 888, 894, 895, 889, 903, 914, 917, 934, 942, 941, 943, 962, 967, 963, 966, 1001, 1003, 1018, 1027, 1034, 1036, 1031, 1038, 1044, 1046, 1050, 1049, 1051, 1065, 1063, 1062, 1071, 1083, 1089, 1100, 1101, 1098, 1099, 1106, 1168, 1169, 1198, 1202, 1203, 1219, 1224, 1225, 1239, 1240, 1256, 1257, 1259, 1276, 1277, 1281, 1285].

element
[1298, 1344, 1348, 1356, 1362, 1364, 1365, 1366, 1370, 1377, 1390, 1397, 1401, 1408, 1418, 1421, 1426, 1427, 1433, 1445, 1456, 1460, 1468, 1470, 1476, 1482, 1484, 1487, 1491, 1489, 1500, 1501, 1505, 1512, 1520, 1530, 1541, 1515, 1524, 1518, 1516, 1533, 1542, 1547, 1561, 1562, 1578, 1589, 1593, 1601, 1600, 1609, 1625, 1641, 1642, 1648, 1673, 1678, 1686, 1689, 1684, 1690, 1695, 1708, 1710, 1737, 1736, 1745, 1757, 1758, 1763, 1768, 1772, 1777, 1788, 1797, 1809, 1815, 1818, 1819, 1832, 1841, 1858, 1859, 1882, 1889, 1897, 1898, 1907, 1914, 1922, 1927, 1929, 1930, 1933, 1936, 1945, 1963, 1974, 1975, 2002, 2032, 2048].

element [2050, 2049, 2063, 2078, 2080, 2087, 2120, 2151, 2136, 2137, 2138, 2146, 2161, 2198, 2199, 2209, 2217, 2241, 2238, 2245, 2248, 713, 711, 2129]. **element-finite** [1476].

elements
[35, 164, 173, 207, 299, 355, 410, 517, 534, 530, 543, 546, 635, 724, 835, 861, 877, 928, 949, 990, 1043, 1115, 1118, 1176, 1210, 1223, 1361, 1378, 1414, 1446, 1449, 1497, 1556, 1581, 1708, 1709, 1751, 1774, 1872, 1913, 1934, 1957, 1995, 2046, 2237, 712, 272, 273].

elimination
[523, 616, 1116, 1792, 2038, 2212]. **Elliott** [1910]. **Elliott-Donaldson** [1910]. **ellipses** [682]. **elliptic**
[4, 54, 60, 91, 92, 117, 164, 212, 237, 239, 240, 241, 236, 335, 337, 362, 379, 380, 429, 434, 437, 455, 456, 481, 503, 510, 514, 512, 551, 554, 609, 590, 614, 664, 674, 716, 715, 749, 786, 805, 823, 826, 834, 833, 850, 891, 893, 905, 911, 960, 1004, 1038, 1061, 1064, 1075, 1076, 1089, 1100, 1101, 1145, 1154, 1169, 1199, 1254, 1276, 1275, 1277, 1278, 1298, 1351, 1384, 1404, 1408, 1416, 1422, 1481, 1501, 1584, 1604, 1643, 1647, 1705, 1724, 1750, 1848, 1906, 2002, 2050, 2049, 2081, 2195, 2215, 2218, 2230, 2247, 710, 739, 738].

elliptic-hyperbolic [823]. **emanating** [334]. **embedded** [488, 814, 815]. **embedding** [1835]. **embeddings** [464]. **empirical** [1045]. **enclosures** [50]. **End** [268]. **endpoint** [1853]. **endpoints** [1012]. **Energy** [327, 1186, 1377, 87, 708, 798, 800, 1054, 1125, 1152, 1284, 1533, 1777, 2066, 2080, 2134, 2236, 2245]. **energy-based** [2080, 2236]. **energy-conserving** [800]. **Energy-corrected** [1377]. **energy-dependent** [708]. **Energy-diminishing** [1186]. **energy-dissipative** [1284]. **Energy-preserving** [327, 1152, 2134]. **energy-stable** [2245]. **enhanced** [2096]. **enhancement** [292, 1167, 1691]. **Enhancing** [2189]. **Enlarged** [48]. **enriched** [644, 875, 1237]. **Enright** [1241]. **ensemble** [1163]. **ensemble-proper** [1163]. **ensembles** [1164]. **ensuring** [913]. **enthalpy** [847, 887, 1520, 2041, 2128]. **enthalpy-type** [2041]. **Entries** [96, 1327, 1912]. **entropy** [1073, 1388, 1887, 2231]. **Envelope** [1077, 1]. **enveloping** [1640]. **environment** [871]. **epidemic** [1582]. **equal** [1034, 1044]. **equal-order** [1034]. **equality** [612, 1660, 1738]. **equality-constrained** [612]. **equally** [1822]. **equation** [1, 6, 8, 27, 46, 44, 49, 50, 58, 75, 111, 119, 122, 125, 126, 139, 149, 157, 159, 162, 161, 164, 181, 193, 195, 199, 202, 215, 218, 222, 275,

293, 298, 311, 325, 385, 406, 409, 418, 417, 441, 451, 466, 496, 498, 506, 522, 518, 535, 543, 546, 552, 567, 568, 573, 585, 597, 589, 586, 587, 619, 626, 638, 650, 656, 663, 677, 689, 694, 708, 709, 717, 726, 761, 780, 784, 791, 800, 819, 820, 848, 851, 853, 854, 865, 871, 895, 901, 903, 919, 923, 927, 929, 933, 932, 952, 964].

equation

[965, 981, 1004, 1023, 1046, 1053, 1054, 1062, 1097, 1109, 1122, 1139, 1152, 1154, 1157, 1165, 1166, 1179, 1181, 1197, 1206, 1207, 1209, 1248, 1265, 1266, 1296, 1294, 1293, 1320, 1342, 1373, 1367, 1391, 1395, 1455, 1474, 1479, 1491, 1490, 1489, 1496, 1510, 1531, 1527, 1523, 1536, 1542, 1556, 1572, 1586, 1592, 1605, 1619, 1642, 1656, 1661, 1674, 1675, 1687, 1698, 1722, 1741, 1745, 1754, 1751, 1753, 1752, 1756, 1771, 1775, 1805, 1837, 1841, 1856, 1873, 1882, 1919, 1942, 1946, 1963, 1961, 1962, 1971, 1998, 1999, 2005, 2090, 2131, 2149, 2141, 2159, 2170, 2176, 2188, 2194, 2209, 2207, 2213, 2238].

equation [2246, 2251, 2252, 712, 272].

Equations

[30, 1355, 11, 14, 29, 41, 42, 40, 65, 74, 78, 86, 117, 121, 123, 124, 127, 135, 136, 160, 158, 165, 167, 169, 174, 180, 183, 182, 190, 192, 196, 200, 206, 208, 211, 214, 213, 237, 238, 239, 240, 241, 225, 243, 270, 281, 282, 287, 292, 297, 300, 304, 307, 310, 312, 311, 313, 315, 321, 326, 328, 327, 342, 347, 346, 348, 360, 361, 364, 371, 372, 390, 416, 422, 436, 440, 446, 449, 448, 452, 450, 454, 459, 460, 461, 487, 494, 502, 511, 519, 531, 545, 557, 556, 565, 564].

equations

[563, 569, 574, 606, 607, 594, 584, 588, 616, 620, 624, 635, 676, 678, 692, 696, 697, 716, 715, 735, 737, 744, 749, 756, 775, 777, 786, 797, 807, 811, 825, 829, 830, 836, 835, 855, 857, 862, 873, 874, 877, 879, 880, 889, 905, 910, 911, 912, 938, 941, 943, 944, 956, 962, 966, 989, 992, 1005, 1006, 1013, 1019, 1022, 1027, 1034, 1035, 1036, 1051, 1077, 1102, 1103, 1107, 1120, 1121, 1119, 1126, 1147, 1149, 1153, 1158, 1160, 1159, 1167, 1177, 1189, 1194, 1200,

1205, 1220, 1232, 1231, 1239, 1241, 1254, 1253, 1251, 1255, 1256, 1258, 1263, 1267, 1268].

equations

[1275, 1287, 1284, 1304, 1314, 1322, 1323, 1339, 1343, 1344, 1348, 1352, 1358, 1359, 1360, 1362, 1364, 1375, 1374, 1376, 1384, 1383, 1386, 1407, 1405, 1406, 1413, 1409, 1415, 1422, 1423, 1432, 1431, 1433, 1434, 1437, 1450, 1452, 1457, 1460, 1469, 1476, 1480, 1481, 1486, 1492, 1493, 1497, 1514, 1525, 1546, 1529, 1522, 1538, 1539, 1530, 1515, 1528, 1518, 1544, 1548, 1551, 1549, 1557, 1566, 1575, 1571, 1569, 1579, 1578, 1573, 1594, 1595, 1596, 1597, 1598, 1604, 1610, 1611, 1608, 1613, 1621, 1622, 1627, 1628, 1629, 1630, 1632, 1634, 1655, 1657, 1658, 1669, 1670, 1672, 1679, 1688, 1696, 1710, 1714, 1715, 1717].

equations

[1716, 1735, 1737, 1736, 1739, 1750, 1755, 1767, 1769, 1785, 1788, 1817, 1818, 1819, 1820, 1824, 1833, 1835, 1855, 1864, 1885, 1888, 1889, 1894, 1898, 1900, 1907, 1908, 747, 1929, 1931, 1940, 1941, 1944, 1948, 1949, 1954, 1964, 1969, 1972, 1981, 1986, 1989, 1997, 1996, 2001, 2009, 2006, 2007, 2008, 2015, 2016, 2026, 2029, 2028, 2033, 2035, 2042, 2067, 2068, 2083, 2086, 2089, 2104, 2142, 2154, 2145, 2134, 2150, 2143, 2161, 2165, 2178, 2180, 2195, 2192, 2197, 2208, 2214, 2230, 2233, 2236, 2248, 2250, 2254, 740, 1318, 2072, 2115, 2111, 2110, 1162].

equidistributing [2211]. **equidistribution**

[553]. **equilateral** [1308]. **Equilibrated**

[909, 575, 687, 686, 1771]. **equilibration**

[409]. **equilibration-based** [409].

equilibria [1969]. **Equilibrium**

[1955, 51, 242, 853, 1227, 1502, 1973].

equipped [849]. **equispaced** [163, 837, 985].

Equivalence [908, 1813, 1825, 2202, 2203].

equivalence-preserving [1825]. **Errata**

[658, 838, 1630]. **Erratum**

[82, 394, 469, 879, 1009, 1230, 1398, 1552,

1682, 1725, 2031, 2201, 712, 388]. **Error**

[27, 44, 59, 92, 93, 131, 179, 197, 214, 256,

255, 373, 435, 497, 504, 516, 538, 585, 603,

638, 663, 677, 691, 887, 919, 1019, 1122, 1209,

1212, 1258, 1366, 1435, 1479, 1522, 1564, 1608, 1622, 1713, 1778, 1790, 1791, 1830, 1878, 1882, 1883, 1894, 747, 1928, 1960, 1963, 1987, 2044, 2047, 2133, 2221, 2222, 740, 26, 32, 34, 36, 33, 37, 115, 116, 118, 120, 126, 129, 130, 136, 139, 140, 144, 165, 215, 218, 228, 230, 235, 250, 276, 306, 312, 314, 315, 353, 409, 418, 428, 424, 462, 475, 479, 480, 483, 500, 503, 531].

error
[535, 544, 610, 604, 594, 590, 593, 600, 623, 624, 649, 685, 687, 686, 725, 750, 760, 772, 775, 792, 802, 803, 804, 806, 811, 812, 816, 872, 874, 893, 903, 909, 967, 970, 993, 1027, 1035, 1039, 1044, 1065, 1061, 1062, 1059, 1064, 1075, 1083, 1098, 1102, 1125, 1147, 1162, 1170, 1234, 1242, 1255, 1256, 1275, 1277, 1304, 1312, 1357, 1369, 1372, 1375, 1374, 1396, 1405, 1406, 1415, 1418, 1421, 1430, 1441, 1442, 1443, 1454, 1460, 1461, 1462, 1463, 1464, 1466, 1470, 1471, 1476, 1500, 1510, 1534, 1545, 1559, 1561, 1566, 1570, 1581, 1603, 1611, 1621, 1626, 1634].

error [1650, 1662, 1672, 1675, 1697, 1719, 1720, 1737, 1771, 1775, 1789, 1792, 1798, 1806, 1811, 1816, 1823, 1856, 1873, 1877, 1898, 1902, 1906, 1941, 1985, 1990, 2032, 2057, 2060, 2078, 2121, 2132, 2148, 2158, 2139, 2152, 2196, 2188, 2223, 2224, 2248, 2250, 738, 742, 2114, 2107, 2138, 263].

Errors [2118, 1017, 1210, 1645, 1702, 1831, 2127, 2218, 2225]. **ESPIRA** [774]. **ESPRIT** [774]. **Essential** [356, 1647]. **estimate** [27, 120, 315, 488, 610, 600, 603, 802, 827, 893, 1461, 1521, 1550, 1561, 2121, 2224, 2250].

Estimates
[284, 1719, 1720, 26, 44, 92, 93, 129, 131, 130, 140, 144, 165, 211, 238, 240, 255, 263, 270, 276, 373, 384, 463, 479, 483, 497, 503, 535, 538, 585, 594, 590, 593, 638, 677, 691, 725, 772, 792, 804, 903, 909, 908, 919, 935, 967, 993, 1019, 1021, 1027, 1065, 1083, 1098, 1102, 1125, 1137, 1147, 1162, 1170, 1209, 1234, 1256, 1312, 1369, 1407, 1405, 1406, 1412, 1418, 1430, 1435, 1442, 1443, 1460, 1462, 1463, 1476, 1534, 1545, 1559, 1555, 1581, 1603, 1611, 1608, 1621, 1634, 1684, 1691, 1713, 1737, 1775, 1806, 1816, 1873, 1882, 1894, 1902, 747, 1935].

estimates [1941, 1947, 1963, 1990, 2032, 2044, 2047, 2057, 2060, 2078, 2090, 2145, 2138, 2196, 2223, 2222, 2248, 742].

Estimating [1012]. **estimation**
[59, 91, 129, 353, 414, 480, 500, 623, 686, 774, 812, 816, 1373, 1421, 1466, 1470, 1471, 1546, 1566, 1626, 1662]. **estimator**
[136, 428, 462, 575, 685, 687, 1771, 1823, 2132].

estimators [540, 1415, 1847]. **Euclidean**
[773]. **Euler**
[75, 293, 342, 586, 605, 684, 1072, 1177, 1220, 1232, 1268, 1483, 1514, 1544, 1560, 1669, 1700, 1760, 1764, 1767, 1824, 2151].

Euler-type [1669, 1700]. **Eulerian**
[1518, 1763, 2142, 2145, 2129]. **Evaluation**
[706, 1280, 159, 264, 266, 380, 536, 688, 763, 1066, 1269, 1380, 1760, 1786, 1791, 1916].

evolution
[74, 86, 209, 243, 347, 692, 761, 825, 1099, 1215, 1251, 1358, 1674, 1675, 2035].

evolutionary [29, 775, 852, 993, 1200].

evolutions [247]. **evolving**
[861, 862, 865, 896, 889, 1099, 1445, 1446, 1447, 1518, 1598, 1763]. **Exact**
[363, 584, 1274, 1916, 630, 1088, 1428, 1576, 1883, 1948, 1972, 2052]. **exactly** [1809].

exactness [442]. **example** [2227].

exchange [638]. **Existence**
[954, 1382, 668, 1375, 1868]. **exit** [1261]. **exp**
[345]. **expansion**
[985, 1461, 1564, 1721, 2141].

expansion-contraction [1721].

expansions [21, 423, 468, 916, 1309, 1335, 1336, 1672, 1939, 469]. **Expected** [975].

experiments [290]. **Explicit**
[1539, 2210, 2232, 5, 42, 40, 71, 124, 500, 576, 882, 1035, 1139, 1140, 1242, 1358, 1560, 1613, 1651, 1804, 1892, 2030, 2031, 1538].

exploiting [1025]. **exploration** [1950].

exponent [197, 1549]. **Exponential**
[1252, 1965, 1964, 64, 208, 347, 346, 408, 492, 550, 586, 615, 661, 907, 938, 1263, 1302,

1326, 1342, 1419, 1477, 1523, 1577, 1589, 1627, 1651, 1659, 1686, 1685, 1735, 1805, 1989, 1990, 1998, 2157].
exponential-fitting [661, 1998].
exponential-type [1523]. **Exponentially** [1055, 609, 1104, 1688, 1999, 2054].
exponentially-fitted [1999]. **exponentials** [2167]. **expressed** [73]. **extended** [991, 2105]. **Extending** [657]. **extensible** [1975]. **extension** [884, 2084, 2206, 743].
extensions [977, 1713]. **exterior** [214, 442, 490, 690, 914, 933, 931, 2052].
external [1899]. **extrapolation** [842, 930, 1092, 1271, 1350, 1467, 1556, 1804, 1894, 1979, 1980, 1993, 2133].

Faber [1821]. **fabrication** [1192, 1191]. **face** [877, 711]. **factor** [1152, 1612].
factorization [72, 365, 560, 566, 653, 838, 843, 841, 1905, 1249, 1422, 1734, 1923, 1937, 745].
factorization-related [1422].
factorizations [1094]. **factors** [1260, 1900, 2037, 2239]. **Falk** [2224]. **falling** [41]. **Families** [813, 2178]. **family** [35, 340, 556, 1378, 1473, 1787, 2125, 2145, 2240, 2241]. **far** [1363]. **Fast** [9, 264, 266, 380, 423, 915, 916, 987, 1057, 1074, 1244, 1766, 2042, 2091, 2140, 2186, 2246, 174, 269, 340, 1070, 1130, 1190, 1316, 1380, 1480, 1781, 1846, 1893, 2004, 2064].
fBms [790]. **FE** [1833]. **features** [51, 1299].
Feedback [1146, 2208]. **Fejér** [884, 885].
Fem [1616, 10, 75, 91, 202, 208, 323, 438, 455, 456, 503, 529, 526, 527, 551, 833, 872, 931, 955, 1024, 1028, 1685, 1687, 1688, 1965, 2188].
FEM-BEM [955]. **FENE** [232, 233].
FENE-P [232, 233]. **Fermi** [50].
ferromagnetic [2011]. **FETI** [2087]. **few** [1400]. **FFT** [1190, 1839]. **FFT-based** [1190]. **FFTRR** [1070]. **FFTRR-based** [1070]. **Fickian** [262]. **fictitious** [931, 1724].
fidelity [890]. **Fiedler** [748]. **field** [245, 236, 325, 384, 610, 638, 897, 888, 1418, 1430, 1545, 1543, 1558, 1559, 1574, 2044, 2221].
fields [176, 690, 948, 1085, 1363, 1519, 1641].
Fife [1430]. **fifth** [1559]. **fifth-order** [1559].
filament [2019]. **fill** [838, 843]. **film** [41, 227]. **Filon** [2201, 804, 1623, 2141, 2200].
Filon-type [2201, 2141, 2200]. **filters** [2059].
finance [1246]. **Finding** [769, 1495, 1627, 748]. **Finite** [13, 16, 46, 133, 171, 241, 242, 234, 229, 231, 233, 262, 277, 289, 317, 335, 366, 399, 437, 489, 509, 522, 554, 750, 861, 865, 888, 895, 934, 1031, 1049, 1083, 1089, 1118, 1233, 1256, 1257, 1348, 1355, 1356, 1401, 1491, 1489, 1601, 1742, 1768, 1777, 1824, 1936, 1967, 2050, 2049, 3, 7, 18, 25, 32, 35, 36, 33, 37, 43, 44, 55, 59, 57, 62, 69, 85, 86, 89, 92, 123, 128, 127, 132, 134, 139, 140, 146, 164, 165, 166, 173, 180, 199, 212, 214, 216, 218, 219, 221, 237, 238, 239, 240].
finite [225, 224, 228, 230, 227, 248, 235, 265, 270, 275, 276, 279, 291, 293, 300, 299, 302, 310, 309, 320, 328, 330, 329, 341, 355, 354, 357, 360, 361, 400, 403, 404, 409, 410, 424, 429, 427, 481, 483, 488, 497, 498, 508, 520, 534, 530, 528, 533, 531, 532, 543, 546, 547, 548, 557, 555, 556, 573, 576, 575, 578, 579, 585, 610, 592, 622, 629, 633, 635, 641, 651, 664, 676, 677, 697, 718, 724, 728, 749, 762, 763, 776, 784, 786, 789, 823, 827, 826, 830, 836, 854, 855].
finite [869, 875, 878, 877, 884, 891, 893, 898, 894, 889, 903, 905, 917, 919, 920, 923, 922, 926, 942, 941, 943, 959, 962, 967, 963, 966, 982, 984, 990, 1003, 1018, 1027, 1032, 1034, 1036, 1040, 1043, 1044, 1046, 1050, 1051, 1065, 1063, 1062, 1100, 1101, 1098, 1099, 1115, 1168, 1169, 1196, 1198, 1202, 1203, 1210, 1219, 1223, 1224, 1225, 1265, 1266, 1276, 1277, 1281, 1285, 1284, 1292, 1329, 1344, 1362, 1364, 1365, 1366, 1370, 1377, 1384, 1383, 1387, 1388, 1390, 1397, 1408, 1414, 1418, 1421, 1424, 1426, 1427, 1433, 1437, 1438, 1445, 1446, 1449, 1456, 1460, 1468, 1470].
finite

[1476, 1482, 1484, 1487, 1497, 1500, 1501, 1512, 1520, 1517, 1540, 1538, 1539, 1530, 1541, 1515, 1524, 1518, 1516, 1533, 1542, 1547, 1556, 1562, 1578, 1589, 1593, 1600, 1603, 1609, 1617, 1615, 1614, 1625, 1641, 1642, 1648, 1678, 1679, 1686, 1689, 1684, 1695, 1702, 1708, 1709, 1710, 1722, 1745, 1751, 1756, 1757, 1758, 1763, 1770, 1772, 1774, 1784, 1788, 1797, 1809, 1815, 1818, 1819, 1832, 1841, 1858, 1859, 1882, 1889, 1897, 1898, 1907, 1914, 1913, 1922, 1927, 1929, 1930, 1933, 1934, 1945, 1957, 1963, 1974, 1975, 1987, 1995, 2002, 2020, 2032, 2044, 2045, 2047, 2048, 2053, 2063, 2078, 2080, 2087, 2120, 2126, 2128]. **finite** [2149, 2151, 2146, 2161, 2170, 2190, 2199, 2217, 2218, 2219, 2223, 2222, 2224, 2237, 2241, 2238, 2245, 2248, 2255, 710, 712, 272, 2129, 232, 1191]. **Finite-difference** [437, 1967, 7, 357, 578, 579, 926, 1265, 1384, 1383, 1617, 1615, 1614, 1722, 1751, 2044, 2128]. **finite-dimensional** [633, 1424, 1191]. **Finite-element** [133, 241, 242, 262, 1083, 1089, 1491, 1489, 1768, 2050, 2049, 36, 85, 92, 134, 212, 214, 237, 238, 239, 240, 225, 224, 227, 276, 302, 310, 403, 404, 481, 488, 610, 622, 749, 823, 869, 893, 894, 943, 1050, 1169, 1219, 1224, 1277, 1365, 1418, 1427, 1433, 1482, 1484, 1500, 1520, 1542, 1593, 1708, 1710, 1757, 1758, 1772, 1797, 1841, 1859, 1889, 1922, 1930, 1974, 1975, 2002, 2032, 2080, 2087, 2161]. **finite-element-based** [199]. **finite-part** [763, 789, 898, 1517, 2053, 2190]. **finite-range** [1540]. **finite-sum** [279]. **Finite-volume** [399, 554, 89, 404, 557, 555, 622, 651, 728, 823, 830, 920, 1032, 1292, 1388, 1756, 2218]. **Finite-volume-element** [335]. **First** [319, 2036, 23, 287, 380, 450, 451, 528, 533, 571, 879, 880, 1119, 1330, 1564, 1596, 1669, 2007, 2008]. **first-kind** [451]. **First-order** [2036, 23, 528, 533, 879, 880, 1330, 1564]. **fits** [224]. **Fitted** [239, 850, 23, 1292, 1999, 2149]. **fitting** [661, 679, 682, 699, 732, 787, 788, 1998]. **FitzHugh** [77]. **fix** [1829]. **fixed** [340, 750, 1017, 1702, 2030, 2031, 2116]. **Fletcher** [47, 719, 882]. **Flexible** [702, 616]. **floating** [961, 1259, 1280]. **floating-point** [961, 1280]. **flow** [25, 35, 59, 69, 220, 246, 235, 251, 257, 256, 305, 387, 388, 426, 427, 520, 602, 647, 751, 863, 870, 892, 923, 964, 974, 1029, 1030, 1050, 1052, 1099, 1164, 1201, 1257, 1285, 1382, 1403, 1411, 1494, 1506, 1547, 1777, 1867, 1890, 1965, 2119]. **flow-box** [1030]. **flow-erratum** [388]. **flows** [45, 41, 43, 244, 314, 341, 475, 542, 599, 664, 900, 1037, 1056, 1070, 1163, 1465, 1541, 1593, 1966, 2048]. **fluid** [59, 133, 220, 863, 967, 970, 969, 1031, 1050, 1052, 1533, 1832, 1927, 2119]. **fluid-fluid** [1533]. **fluid-structure** [970, 1031, 1832, 1927]. **fluidized** [630]. **fluids** [315, 542, 759, 1257, 1758, 1897, 2048, 1757]. **Flux** [1924, 222, 238, 240, 480, 611, 644, 686, 909, 1047, 1279, 1305, 1412, 1462, 1887, 2032]. **Flux-stability** [1924]. **fluxes** [1684, 1771]. **Fock** [1434]. **focused** [508]. **Fokker** [1284, 1293, 1752]. **folded** [255]. **following** [20]. **forces** [227, 1825]. **Forchheimer** [62, 545, 759]. **forcing** [58, 422, 1293]. **form** [148, 440, 846, 1223, 1260, 1481, 1593, 2017]. **formal** [76]. **formalism** [626]. **forms** [571, 918]. **formula** [163, 211, 360, 549, 733, 1477, 2004, 2064, 2112, 2190]. **formulae** [42, 294, 541, 753, 789, 813, 814, 815, 978, 1194, 1274, 1620, 1676, 1830, 1891, 1910, 2029, 2028]. **formulas** [205, 473, 507, 984, 991, 1088, 1435, 1795, 2065, 2066]. **formulation** [78, 95, 220, 250, 298, 307, 320, 332, 371, 440, 493, 544, 545, 893, 888, 1026, 1031, 1051, 1107, 1227, 1532, 1678, 1736, 1781, 1858, 1908, 2035, 2103, 2128, 2134]. **formulations** [248, 319, 385, 687, 686, 847, 1039, 1125, 1181, 1457]. **forth** [871]. **Fortin** [33]. **forward** [286, 1570, 1702, 1716, 1902].

forward-backward [1570, 1902]. **FOSLS** [1026]. **Four** [2009, 1984, 1998]. **four-step** [1998]. **Fourier** [446, 717, 957, 959, 1225, 1272, 1332, 1335, 1509, 1610, 1654, 1712, 1760, 1837, 1939, 2012, 2064, 2150]. **Fourier-finite-element** [1225]. **Fourier-series** [717]. **Fourth** [357, 288, 289, 578, 592, 758, 830, 979, 1061, 1089, 1134, 1527, 1632, 1692, 1695, 1999, 2010, 2236]. **Fourth-order** [357, 288, 289, 578, 592, 758, 830, 979, 1061, 1089, 1134, 1527, 1632, 1692, 1695, 2010, 2236]. **Fox** [96, 839]. **fractal** [637]. **fractals** [17]. **Fractional** [1439, 1596, 9, 16, 49, 115, 113, 147, 317, 362, 369, 370, 420, 472, 506, 522, 593, 624, 834, 833, 955, 1047, 1156, 1267, 1293, 1366, 1397, 1401, 1405, 1406, 1423, 1478, 1490, 1499, 1675, 1687, 1688, 1753, 1755, 1752, 2045, 2248]. **fractional-order** [1675]. **fractional-step** [1405, 1406]. **fractionally** [1397]. **fractions** [380, 706]. **fracture** [426]. **fractured** [426, 425, 521, 1506]. **fragmentation** [13]. **frame** [716, 2034]. **frames** [672]. **framework** [703, 704, 1204, 1527]. **Francis** [1095]. **Fredholm** [160, 287, 453, 693, 1189, 1376, 1658]. **free** [12, 36, 219, 347, 346, 359, 570, 612, 613, 665, 752, 873, 948, 990, 1005, 1036, 1112, 1176, 1290, 1354, 1529, 1541, 1543, 1547, 1578, 1580, 1639, 1747, 1793, 1809, 1858, 1913, 2021, 2171, 2177, 2232, 2242]. **free-boundary** [12]. **freedom** [195]. **frequencies** [447]. **frequency** [193, 204, 375, 799, 864, 1017, 1041, 1071, 1240, 1623]. **frequency-dependent** [864]. **frequency-independent** [1240]. **frictional** [217]. **frictionless** [31]. **friendly** [1993]. **front** [1520, 1924]. **front-tracking** [1520]. **fronts** [1020]. **FSI** [95]. **Full** [30, 1723, 418, 684, 811, 1216, 1622, 1936, 2146]. **full-discretization** [418, 2146]. **Fully** [4, 205, 270, 776, 855, 1312, 2048, 44, 62, 119, 605, 656, 759, 790, 820, 1051, 1219, 1266, 1279, 1406, 1465, 1515, 1532, 1628, 1673, 1902, 2057, 2231, 742]. **function** [307, 380, 470, 536, 674, 733, 985, 986, 1014, 1074, 1237, 1326, 1419, 1428, 1499, 1555, 1711, 1736, 1836, 1846, 1878, 1908, 2065, 2196]. **function-evaluation** [536]. **functional** [329, 454, 494, 956, 2254]. **functionals** [649, 846, 1699, 1865, 2060]. **functions** [22, 70, 71, 76, 155, 264, 280, 345, 414, 423, 445, 561, 601, 614, 672, 702, 705, 754, 753, 764, 787, 831, 849, 859, 902, 983, 1012, 1104, 1113, 1136, 1143, 1180, 1269, 1315, 1340, 1458, 1488, 1499, 1567, 1580, 1606, 1644, 1704, 1747, 1748, 1786, 1793, 1830, 1846, 1911, 1950, 1982, 1993, 2066, 2112, 2162, 2164, 2187]. **fundamental** [1254, 1402, 1857]. **furnace** [302]. **Further** [28, 287, 1789, 2099]. **FV** [1833]. **FV-FE** [1833]. **G** [340]. **Gagliardo** [498]. **Galerkin** [23, 29, 36, 65, 74, 78, 121, 123, 124, 125, 126, 143, 149, 160, 165, 174, 179, 194, 210, 226, 250, 292, 297, 298, 323, 328, 337, 439, 440, 450, 482, 490, 513, 517, 524, 531, 563, 568, 607, 602, 589, 590, 614, 619, 636, 637, 648, 649, 664, 663, 685, 725, 777, 785, 802, 806, 864, 869, 875, 910, 930, 960, 964, 1000, 1033, 1056, 1065, 1063, 1060, 1061, 1059, 1120, 1147, 1155, 1276, 1275, 1277, 1294, 1360, 1376, 1382, 1390, 1397, 1404, 1425, 1454, 1460, 1461, 1468, 1481, 1486, 1490, 1506, 1525, 1562, 1573]. **Galerkin** [1604, 1611, 1608, 1609, 1625, 1643, 1692, 1691, 1697, 1708, 1743, 1745, 1746, 1753, 1755, 1766, 1779, 1815, 1818, 1819, 1852, 1871, 1872, 1929, 1931, 1958, 1961, 1965, 2009, 2007, 2008, 2014, 2026, 2035, 2090, 2135, 2157, 2160, 2226, 2236, 738]. **Galerkin-Chebyshev** [1525]. **Galerkin-finite** [123]. **Galerkin-like** [1958]. **games** [373, 1574]. **Gamma** [368, 380]. **Gamma-convergent** [368]. **GAOR** [2155]. **gap** [460]. **gas** [867, 868, 1087]. **gauge** [626, 1608, 1609]. **Gauss** [350, 485, 936, 1260, 1713, 1795, 1865,

2029, 2028, 2064, 2091, 2169]. **Gauss-type** [2029, 2028]. **Gaussian** [111, 153, 176, 246, 296, 523, 849, 1085, 1214, 1659, 1667, 1698, 1711, 1792, 1830, 2038, 2093]. **Gaver** [1475]. **Gegenbauer** [2139]. **GenEO** [374]. **general** [25, 90, 400, 484, 576, 606, 620, 644, 758, 782, 805, 830, 846, 905, 921, 1296, 1293, 1304, 1476, 1549, 1811, 1836, 1885, 1888, 1913, 2068, 2242]. **general-order** [1836]. **generalization** [565, 667, 696, 1341, 1396, 1719, 1720]. **Generalizations** [1633]. **Generalized** [457, 789, 924, 1321, 1453, 1583, 2159, 144, 207, 315, 321, 341, 1006, 1008, 1114, 1212, 1317, 1391, 1435, 1540, 1718, 1809, 2147, 639]. **generated** [507]. **generates** [1080]. **generating** [561]. **generation** [1146, 2211]. **generator** [1607]. **genesis** [1095]. **Gennes** [1625]. **Geodesic** [1934, 1926]. **geodesics** [2116]. **Geometric** [452, 1160, 1287, 24, 182, 243, 884, 1157, 1311, 1966]. **Geometrically** [1676, 439]. **geometries** [462, 1480]. **Geometry** [665, 1122, 1235, 2116]. **Gevrey** [1588]. **Gibbs** [20]. **Gilbert** [199, 202, 780, 851]. **give** [1017]. **given** [919, 983]. **Givens** [801]. **gives** [771]. **Glimm** [1020]. **Glimm-like** [1020]. **Global** [71, 178, 393, 394, 451, 500, 812, 816, 1242, 1271, 1990, 2082, 2127, 47, 908, 1008, 1079, 1132, 1253, 1301, 1386, 1466, 2042, 2235, 2181]. **global-best** [908]. **globally** [259, 1270, 1358]. **GMRES** [48, 184, 2077]. **GMWB** [1300]. **Goal** [686]. **Goal-oriented** [686]. **Golub** [1636]. **good** [1523, 1662]. **Gordon** [2047, 2223, 626, 1918, 2089, 2134]. **Gottlieb** [1849]. **governed** [903]. **governing** [2149]. **Grad** [994]. **Grad-div** [994]. **graded** [130, 854]. **Gradient** [411, 426, 425, 824, 1482, 43, 51, 81, 88, 142, 183, 244, 257, 261, 343, 599, 608, 685, 721, 722, 827, 882, 937, 968, 1037, 1099, 1186, 1341, 1357, 1481, 1512, 1646, 1777, 1880, 1896, 2000, 2124, 2189, 2235]. **gradient-like** [51, 599]. **gradient-multigrid** [2124]. **gradients** [705, 1212]. **grading** [128, 1042]. **Gram** [1080]. **graph** [927, 1243, 1867]. **Graphs** [1913, 146, 474]. **Green** [831]. **Gregory** [1734]. **Grid** [432, 265, 304, 510, 553, 902, 983, 1146, 1270, 1568, 1617, 1901, 2179, 922]. **grids** [53, 140, 572, 848, 990, 1110, 1136, 1137, 1180, 1552, 1889, 1909, 2238]. **Gross** [800, 858, 1053]. **ground** [937]. **groundwater** [1547]. **Group** [1519, 915, 1169, 2202]. **groups** [1144, 1992, 2144]. **growing** [1614]. **growth** [421, 516, 605, 828, 968, 1464, 817]. **Grünwald** [2024]. **GSVD** [332]. **Guaranteed** [803, 1906, 2121, 687, 1300]. **guarantees** [1394, 1796, 2220]. **guard** [1790]. **Gummel** [1954]. **Gupta** [717]. **Gurtin** [415]. **gyrokinetic** [328]. **gyrokinetic-waterbag** [328]. **H** [1541, 777, 1005]. **Haar** [2179]. **Hadamard** [763, 898, 1517, 2053]. **Hahn** [2004]. **half** [755, 1560, 1804, 2006]. **half-explicit** [1560, 1804]. **half-line** [755, 2006]. **Hall** [2113]. **Hamilton** [437, 459, 1348, 1355, 1710]. **Hamiltonian** [588, 632, 655, 799, 1451, 1468, 1508, 1571, 1840, 1956]. **Hammerstein** [1022, 1469]. **hand** [48, 2051, 2077]. **Handling** [700, 710]. **hanging** [36]. **Hankel** [633, 1327]. **Hardy** [2065, 2066]. **harmonic** [113, 256, 615, 687, 686, 1049, 1530, 1573, 1613, 1904, 1976, 1977]. **harmonically** [865]. **Hartree** [1434]. **having** [678]. **HDG** [138, 594, 645, 647, 646, 694, 1005, 1006, 1591, 1592, 1728, 1885, 1886, 2018, 2095, 606]. **heat** [32, 58, 119, 122, 256, 293, 311, 404, 585, 586, 689, 1051, 1102, 1455, 1687, 1873]. **Heath** [1459]. **heating** [1356]. **Hele** [893]. **Helfrich** [1125]. **Helfrich-type** [1125]. **Hellan** [2131]. **Helmholtz** [204, 313, 375, 385, 597, 694, 1014, 1097, 1360, 1690, 1745, 2016, 2188, 2198]. **hemivariational** [707, 934, 1199]. **Hermite**

[152, 791, 936, 982, 1053, 1635, 1733, 1734, 1928, 2102]. **Hermite-based** [982]. **Hermite-type** [791]. **Hermitian** [188, 999, 2056]. **Herrmann** [2131]. **Hessian** [279, 1004, 1481, 2021, 2183]. **Hessian-free** [2021]. **Hessian-vector** [2021]. **Hessians** [628, 1213]. **Heston** [68, 1700]. **Heterogeneous** [447, 4, 427, 644, 782, 921, 1097, 1122, 1939]. **hexagons** [1115]. **hexahedral** [299]. **HHO** [1888]. **Hierarchical** [204, 519, 918, 432, 463, 1264, 1619]. **hierarchically** [1655]. **High** [53, 298, 385, 501, 580, 581, 635, 744, 814, 815, 1445, 1628, 1722, 1774, 2199, 2231, 21, 121, 204, 347, 346, 361, 377, 414, 480, 478, 524, 539, 570, 808, 820, 829, 864, 909, 911, 1017, 1040, 1041, 1071, 1097, 1145, 1185, 1215, 1228, 1286, 1307, 1308, 1335, 1336, 1487, 1501, 1505, 1623, 1736, 2050, 2049, 2134, 2150, 2143, 2188, 2186, 2222, 542]. **High-accuracy** [580, 581]. **high-contrast** [480]. **High-dimensional** [635, 2199, 1145, 2134, 2150]. **high-frequency** [204, 864, 1017, 1041, 1071, 1623]. **High-order** [298, 385, 744, 814, 815, 1445, 1628, 1722, 1774, 2231, 121, 347, 346, 361, 377, 478, 539, 570, 808, 820, 829, 909, 911, 1040, 1097, 1215, 1228, 1286, 1501, 1505, 2050, 2049, 2143, 2186, 2222, 542]. **Higher** [29, 965, 1261, 1437, 1446, 263, 751, 800, 1092, 1934, 1978, 2125, 2156, 2219, 2115]. **Higher-order** [29, 1261, 1437, 263, 800, 1092, 1978, 2156, 2219, 2115]. **highly** [427, 447, 453, 460, 570, 655, 799, 804, 1332, 1333, 1552, 1793, 1943, 2141, 2200, 2201]. **highly-oscillating** [1332, 1333]. **Hilbert** [143, 1090, 1701, 1840, 1915, 2082, 2093]. **Hilliard** [603, 776, 1489, 49, 149, 231, 784, 1127, 1179, 1209, 1425, 1536, 1696, 1756]. **Hilliard-Stokes** [603]. **HJB** [624]. **Hodge** [371, 1014, 1783]. **HODIE** [641]. **hodograph** [945, 947]. **Hölder** [683, 786, 1890]. **Hölder-norm** [786]. **Holm** [2159]. **holomorphic** [654]. **homoclinic** [334, 998, 1935, 1952]. **Homogeneous** [1591, 1592, 981]. **homogenization** [799, 2123]. **homogenized** [871]. **homotopy** [631, 756, 844]. **Hood** [223, 432]. **Hopf** [577, 1121, 1138, 1657, 2193]. **horizons** [1538, 1539]. **Householder** [2092]. **hp** [1964, 208, 908, 1688, 872, 1685, 1687, 1965, 1966]. **hp-DGFEM** [1964, 1966]. **hp}-FEM** [208, 1688, 872, 1687, 1965]. **HSS** [186]. **human** [24]. **Hybrid** [539, 551, 690, 976, 1629, 1630, 1721, 1927, 426, 478, 808, 829, 869, 870, 911, 921, 1505, 1970, 2226, 542]. **hybrid-dimensional** [426]. **hybridizable** [524, 590, 806]. **hybridized** [1425, 1506]. **hyper** [954]. **hyper-singular** [954]. **Hyperbolic** [981, 338, 397, 398, 558, 618, 662, 676, 809, 823, 919, 1238, 1322, 1352, 1383, 1387, 1691, 1929, 2020, 2030, 2031, 2085]. **hyperbolics** [1330]. **hypercube** [560]. **hyperelastic** [1985]. **hyperinterpolation** [1207]. **hypersingular** [519, 567, 619, 1239]. **hysteresis** [2122]. **identification** [1639]. **II** [21, 168, 208, 225, 664, 816, 857, 894, 1067, 1076, 1133, 1192, 1328, 1333, 1872, 1966, 1980, 2029, 2050, 2126]. **III** [1336, 1585]. **ill** [172, 2054]. **ill-conditioned** [172, 2054]. **IMA** [581, 815, 879, 1630, 2031, 2201, 658]. **image** [890]. **images** [1977]. **IMEX** [780, 1919]. **IMEX-RK** [1919]. **IMEX-type** [780]. **immersed** [95, 1168, 1169, 1297]. **impact** [698, 1868, 1903]. **impedance** [207, 639, 1049, 1370]. **implementation** [19, 184, 1309, 1350, 1893, 2052]. **implemented** [1762]. **Implicit** [548, 1634, 2015, 2128, 45, 41, 42, 40, 189, 293, 300, 315, 338, 472, 484, 487, 501, 505, 541, 638, 671, 670, 749, 891, 989, 1035, 1077, 1152, 1200, 1220, 1268, 1273, 1359, 1558, 1597, 1622, 1751, 1806, 1938, 1940, 1973,

1984, 2069, 2151, 2146]. **implicit-explicit** [40, 1035]. **implicitly** [1680, 2048]. **implies** [2043]. **imposition** [359]. **Improved** [215, 827, 1098, 1785, 2172, 198, 230, 993, 2206, 2106]. **improvement** [388, 501, 1422]. **Improving** [167, 2109, 1467, 1477]. **including** [134, 1890]. **inclusion** [442, 886]. **inclusions** [1516, 1703]. **incompatible** [974]. **incomplete** [1813]. **incompressible** [35, 135, 314, 315, 359, 542, 759, 807, 829, 900, 949, 970, 969, 1036, 1056, 1070, 1177, 1200, 1201, 1220, 1253, 1268, 1382, 1484, 1514, 1593, 1757, 1758, 1824, 1885, 1886, 1888, 1966, 1964, 2015, 2048]. **Increasing** [1733]. **indefinite** [374, 841, 1905, 1646, 1660, 2033]. **indentation** [254]. **indenting** [234]. **independent** [87, 170, 1085, 1240, 1574]. **Index** [97, 99, 101, 104, 106, 108, 643, 1432, 1493, 1548, 1661, 1804, 1969, 1988]. **indicator** [306, 1061, 1275]. **induction** [302, 1437, 1553]. **industry** [1148]. **inequalities** [81, 116, 178, 248, 329, 796, 1118, 1233, 1461, 1828, 1843, 1909, 2063, 2070]. **inequality** [498, 604, 707, 891, 893, 934, 1089, 1199, 1262]. **Inertial** [2115, 1570]. **Inexact** [343, 365, 2220, 47, 145, 280, 279, 363, 595, 584, 703, 773, 999, 1024, 1150, 2184]. **inextensible** [251, 253, 258]. **Inf** [432, 1484, 223, 320, 1666, 740]. **Inf-sup** [432, 1484, 1666]. **Infinite** [984, 633, 683, 1159, 1538, 1539, 1645, 1949, 1993, 2001, 2246]. **infinite-dimensional** [2001]. **Infinite-order** [984]. **infinitely** [1836]. **infinity** [1535]. **inflation** [1985]. **inflow** [1476]. **inflow/outflow** [1476]. **information** [279]. **informed** [912, 1719, 1720, 747]. **Ingersoll** [53, 684]. **inhomogeneous** [938, 1366, 2036]. **initial** [63, 64, 342, 397, 398, 400, 535, 593, 618, 755, 1078, 1303, 1343, 2125, 2197, 2114, 2107, 2108]. **initial-** [400]. **initial-boundary** [593, 755]. **initial-value** [2125, 2108]. **inner** [1398, 1399]. **inpainting** [1519]. **input** [301]. **instability** [2000, 2043]. **Instance** [1456]. **integral** [153, 160, 158, 162, 206, 281, 287, 325, 331, 384, 385, 448, 452, 450, 453, 451, 494, 507, 519, 538, 565, 564, 563, 567, 597, 619, 693, 696, 737, 791, 796, 901, 954, 1022, 1066, 1120, 1119, 1153, 1181, 1239, 1294, 1320, 1339, 1360, 1376, 1452, 1485, 1493, 1496, 1510, 1528, 1549, 1595, 1596, 1656, 1658, 1669, 1672, 1781, 1855, 1900, 1944, 1948, 1981, 2009, 2006, 2007, 2008, 2029, 2028, 2033, 2141, 2172, 2180, 2213, 2072, 2111]. **integrals** [380, 571, 688, 763, 789, 804, 846, 898, 983, 1269, 1274, 1332, 1333, 1517, 1670, 1853, 1993, 2053, 2190]. **integrated** [1397]. **integrating** [63, 64, 1152]. **integration** [19, 182, 282, 506, 516, 541, 783, 849, 853, 1033, 1045, 1058, 1093, 1121, 1186, 1395, 1416, 1434, 1459, 1676, 1793, 1978, 2179]. **integrator** [181, 202, 441, 518, 691, 692, 780, 842, 1805, 2157, 2194, 2208]. **integrator-based** [2157]. **integrators** [5, 347, 346, 383, 460, 492, 501, 655, 800, 907, 1187, 1236, 1263, 1271, 1451, 1498, 1508, 1507, 1523, 1589, 1671, 1779, 1825, 1956, 1983, 2069, 2097]. **integro** [174, 992, 1023, 1189, 1287, 1490, 1548, 1611, 1629, 1630, 1754, 1818, 1820, 1898, 1929, 2067, 2180, 2233]. **integro-differential** [174, 992, 1023, 1189, 1287, 1490, 1548, 1611, 1629, 1630, 1754, 1818, 1898, 1929, 2067, 2180]. **integrodifferential** [196, 449]. **integroparabolic** [8]. **intensities** [301]. **interacting** [213, 605, 1867, 2221]. **interaction** [133, 605, 967, 970, 1031, 1178, 1281, 1282, 1540, 1533, 1832, 2193]. **interactions** [156]. **interest** [1459]. **interface** [425, 481, 480, 478, 489, 806, 1040, 1169, 1297, 1316, 1501, 1542, 1602, 2002]. **interfaces** [239, 426, 896, 921, 1927]. **Interior** [481, 1147, 219, 428, 479, 591, 964, 1036, 1065, 1063, 1094, 1154, 1301, 1363, 1506].

Interior-penalty-stabilized [481].
interlocking [653]. **intermediate** [2241].
interpolant [470, 766]. **interpolants**
 [1133, 1649, 1656, 1657, 1812, 1846, 2013].
interpolate [1326]. **interpolated** [585].
interpolating [61, 1822, 2102].
Interpolation
 [402, 458, 488, 732, 859, 1581, 1992, 711, 129,
 151, 163, 265, 412, 445, 465, 537, 596, 665,
 666, 727, 765, 764, 767, 860, 906, 946, 945,
 948, 953, 979, 985, 996, 1045, 1105, 1135, 1247,
 1347, 1379, 1392, 1499, 1635, 1638, 1652, 1694,
 1778, 1814, 1876, 1928, 2023, 2175, 2196].
interpolations [2244]. **Interpolatory**
 [2053, 268, 1144, 2202]. **interval**
 [640, 754, 1375, 1517, 2105]. **introduced**
 [1328]. **introduction** [1607]. **invariance**
 [1002, 1394]. **invariant** [399, 418, 2058].
inverse [549, 598, 631, 926, 951, 952, 954,
 999, 1007, 1118, 1183, 1214, 1680, 1719, 1912,
 1923, 2003]. **inverse-type** [1118]. **inverses**
 [1444, 2101]. **Inversion**
 [832, 1117, 443, 1759, 1915]. **inverting**
 [1773]. **investigation** [1585]. **involution**
 [1563, 2096]. **involved** [838, 843]. **Involving**
 [1244, 115, 260, 845, 1665]. **IRK** [1008].
irregular [1704, 1764, 1767, 2060, 1333].
irreversible [744]. **iso** [1518].
iso-parametric [1518]. **isoclinical** [1668].
Isogeometric
 [430, 433, 118, 432, 462, 621, 1264]. **isolated**
 [50]. **isometry** [257]. **Isoparametric**
 [85, 1003, 443, 947]. **isothermal** [1418].
Isotropic [1355, 176, 1183]. **Itô** [1261].
Iterated [1120, 358, 448, 1327, 1879].
iterates [501]. **iteration**
 [188, 187, 186, 252, 671, 703, 956, 991, 999,
 1119, 1310, 1492, 1509, 1680, 2062, 2114].
iterations [340, 1553, 2000]. **Iterative**
 [674, 879, 880, 1245, 1371, 1991, 746, 148,
 150, 269, 295, 679, 774, 900, 1089, 1171,
 1422, 1440, 1766, 1946, 2119, 2215, 2216].
iteratively [350]. **IV** [1307].
J [581, 658, 815, 879, 1630, 2031]. **Jacobi**
 [1348, 1355, 1710, 423, 437, 459, 822, 2004,
 2093]. **Jacobi/elliptic** [437]. **Jacobian**
 [698, 1216]. **Jarrow** [1459]. **Jin** [1973].
John [110, 1095]. **Johnson** [2131]. **Jordan**
 [39, 885]. **Joule** [498, 1356]. **Journal** [2201].
jump [1811, 778]. **jumps** [2247]. **June** [110].
Kamel [1241]. **Kantorovich** [1172, 2144].
Kármán [531]. **KdV** [2194]. **Keller**
 [330, 1284, 1930]. **kernel**
 [709, 791, 1178, 1754, 1915, 1944, 2007, 2008,
 2141, 2175, 2207]. **kernels**
 [402, 449, 467, 565, 600, 1528, 1667, 2067].
kind [56, 160, 281, 287, 380, 450, 451, 1120,
 1119, 1294, 1376, 1596, 1658, 1669, 1830,
 2009, 2007, 2008, 2072, 2111]. **kinetic**
 [372, 2086]. **Kirchhoff** [205, 2131, 2137].
Klein [626, 1918, 2047, 2089, 2134, 2223].
knots [837, 1290, 1580, 1747, 1822]. **Kohn**
 [857]. **Kolmogorov** [654]. **Korteweg**
 [677, 820, 1072, 1266, 1474, 1805, 1961].
Kronrod [1713]. **Krylov**
 [953, 1175, 1680, 1849]. **Kublanovskaya**
 [1095]. **Kuramoto** [8, 41, 573, 1586].
Kuramoto-Sakaguchi [8]. **Kutta**
 [813, 814, 815, 1984, 2031, 192, 206, 281, 472,
 486, 500, 501, 505, 541, 671, 667, 668, 669,
 670, 812, 816, 820, 862, 1140, 1193, 1242,
 1283, 1295, 1325, 1466, 1571, 1651, 1779,
 1806, 1892, 1940, 1955, 1969, 1999, 2030,
 2125, 2173, 2233, 1318, 2111, 2105].
Kutta-composition [820]. **Kutta-type**
 [1571].
L [1256, 1600]. **L-shaped** [1600]. **L.** [96].
L.M.F. [562]. **L.M.F.-based** [562]. **l.s.d**
 [2099]. **L1** [1621]. **Lagrange**
 [95, 118, 194, 292, 298, 355, 354, 358, 481,
 835, 1247, 1347, 1503, 1635, 1871, 1872, 2102].
Lagrangian [84, 297, 773, 1124, 1216, 1313,
 1457, 1518, 1881, 2142, 2145]. **Lagrangians**
 [977, 1494]. **Laguerre**
 [1309, 1844, 1657, 2159]. **Laguerre-type**

[1309]. **Lambert** [1938]. **Lamé** [1771].
laminar [1403]. **Lanczos** [1315, 1826].
Landau [851, 75, 199, 202, 638, 780, 1625].
landscape [730]. **Landweber** [1007].
Landweber-type [1007]. **Langevin**
[1441, 1502, 1717]. **Langevin-type** [1717].
LAPACK [1245]. **Laplace** [157, 482, 615,
819, 952, 1344, 1674, 1675, 1915, 1986, 2016].
Laplacian [1009, 89, 115, 275, 371, 420, 762,
1010, 1478, 1535, 1773, 1783]. **Laplacians**
[1203]. **Large** [556, 280, 367, 368, 584, 904,
1111, 1364, 1365, 1529, 1636, 1683, 1681,
1682, 1826, 1997, 2187, 2247]. **large-scale**
[584, 904, 1111, 1529, 1681, 1682, 1997].
Large-time [556, 1365]. **largest**
[1398, 1399]. **later** [1095]. **lateral** [1867].
lattice [502, 626, 1607]. **Laurent** [1654].
law [193, 399, 418]. **laws**
[26, 141, 558, 573, 637, 673, 997, 1188, 1229,
1230, 1238, 1279, 1410, 1412, 1438, 1439, 1691,
1697, 1924, 1967, 1987, 2020, 2085, 2231].
Lawson [63, 1805]. **Lawson-type** [1805].
Lax [632, 1587, 2084]. **Layer**
[1565, 1041, 2088]. **Layer-adapted** [1565].
layers [1577, 1686]. **LBB** [1156]. **LCP**
[1301]. **LDG** [367, 368]. **leading**
[1831, 2098]. **leapfrog** [1321]. **learning**
[474, 572, 1555, 1762]. **Least**
[681, 770, 1709, 2239, 172, 278, 319, 410, 560,
640, 678, 682, 699, 976, 1481, 1530, 1580,
1636, 1660, 1704, 1718, 1802, 1801, 1953,
1965, 2036, 2051, 2174, 2228]. **Least-change**
[2239]. **Least-squares** [681, 172, 319, 410,
560, 640, 682, 699, 1481, 1704, 1953, 2051].
Lebesgue [714, 1182, 1347, 2071]. **leg**
[1157]. **Legendre**
[1190, 1280, 1525, 1844, 1656, 1836].
Legendre-Laguerre [1844]. **Leja**
[1347, 2071]. **length** [208]. **Leray**
[825, 1163]. **Leslie** [839]. **Letnikov** [2024].
level [598, 643, 917, 923, 1352, 1404, 1679,
1780, 1988, 2070, 2198, 2209]. **level-index**
[643, 1988]. **Levenberg** [1503]. **Levin** [154].
Lévy [1438, 2064]. **lexicographic** [1260].
library [1786]. **Lie**
[66, 550, 775, 1144, 1671, 2144, 2202].
Lie-algebraic [550]. **Lifschitz** [851].
Lifshitz [199, 202, 780, 75, 638]. **like**
[51, 542, 599, 1020, 1244, 1525, 1526, 1889,
145, 1328, 1958]. **limit** [984, 2047]. **limited**
[155, 700, 701, 1150]. **limited-memory**
[155]. **limiting** [366, 1104, 1305]. **Limits**
[927, 470, 1635, 2221]. **Lindelöf** [1310]. **line**
[47, 564, 612, 613, 755, 1311, 2006, 2091].
Linear
[195, 546, 780, 1096, 1114, 1663, 2043, 2107,
27, 31, 48, 60, 63, 64, 81, 86, 94, 93, 143, 144,
148, 162, 172, 174, 185, 183, 187, 202, 209,
248, 255, 265, 289, 293, 295, 347, 346, 356,
396, 455, 456, 484, 490, 511, 524, 528, 548,
560, 604, 607, 592, 589, 605, 618, 640, 646, 649,
675, 678, 701, 706, 721, 726, 735, 761, 764, 805,
810, 819, 860, 900, 905, 916, 1006, 1008, 1013,
1033, 1082, 1090, 1116, 1123, 1150, 1155, 1189,
1214, 1222, 1245, 1249, 1251, 1252, 1277, 1301,
1296, 1304, 1322, 1350, 1387, 1389, 1405].
linear
[1421, 1440, 1492, 1512, 1536, 1562, 1565,
1578, 1580, 1594, 1596, 1597, 1618, 1626,
1636, 1641, 1645, 1692, 1699, 1702, 1716,
1723, 1787, 1801, 1831, 1832, 1843, 1860,
1865, 1873, 1901, 1949, 1953, 1989, 1996,
2010, 2011, 2051, 2096, 2158, 2151, 2157,
2152, 2162, 2163, 2165, 2170, 2188, 2199,
2207, 2212, 2227, 2237, 2252, 817, 1319, 1585].
linear-quadratic [1873]. **Linearization**
[43, 73, 2102, 1554, 2015]. **linearized**
[1125, 1489, 1763]. **Linearly** [45, 41, 1152,
1597, 1938, 217, 472, 1761, 1806, 2069, 2146].
lines [2254]. **linogram** [1854]. **Lions**
[547, 825, 1602]. **Liouville** [288, 339, 395,
926, 1012, 1069, 1134, 1271, 1878]. **Lipschitz**
[15, 474, 1143, 1358, 1544, 2146, 2175].
liquid [1625, 1695]. **Lissajous** [381, 906].
Littlewood [2113]. **loading** [371]. **loads**
[911]. **Lobatto** [2029].
Lobatto-Chebyshev [2029]. **Local**
[30, 151, 723, 971, 972, 1017, 1264, 1666,

2023, 2174, 2196, 135, 278, 351, 412, 451, 463, 490, 517, 521, 589, 663, 775, 785, 872, 908, 968, 1178, 1301, 1381, 1415, 1544, 1570, 1677, 1692, 2236, 740]. **local-** [908]. **Locality** [985]. **Localization** [351, 928, 2139]. **Localized** [291, 1462, 1923, 1259, 2142]. **locally** [36, 910, 1143, 1180, 2121]. **locating** [76]. **location** [734, 1869]. **locations** [1477]. **Locking** [1975, 2177, 1578, 2242]. **Locking-free** [2177, 1578, 2242]. **locus** [191]. **Log** [601, 345, 1416, 1700, 1796]. **log-barrier** [1796]. **log-Heston** [1700]. **log-normal** [1416]. **log-sum-exp** [345]. **logarithm** [915, 951]. **logarithmic** [1944, 2007, 2008]. **logarithmic-kernel** [1944]. **logging** [1936]. **Long** [1000, 1387, 2057, 195, 215, 1054, 1975]. **Long-time** [1000, 2057, 195, 215, 1054]. **longtime** [1856]. **Lorentz** [1608]. **loss** [961]. **lossy** [193]. **Low** [1072, 1523, 1853, 1933, 59, 72, 135, 175, 181, 204, 441, 518, 689, 724, 803, 1249, 1285, 1541, 1556, 1576, 1634, 2100, 2194, 711]. **low-** [204]. **Low-order** [1853, 1933, 59, 135, 724, 1285, 1541, 711]. **low-rank** [72, 175, 803, 1249, 1576, 2100]. **low-regularity** [181, 441, 518, 2194]. **Lower** [1064, 1995, 2253]. **lowers** [2166]. **lowest** [223, 805, 2243]. **lowest-order** [805, 2243]. **lumped** [1057, 1772]. **Lyapunov** [1197, 1680, 2001, 2127]. **Lyness** [76].

M [340, 401]. **m-DDFV** [401]. **M/G/1** [340]. **M/G/1-type** [340]. **MAC** [1083, 1634]. **MacCamy** [415]. **Mach** [1072, 1634]. **Maclaurin** [1760]. **macro** [949]. **macroelement** [433]. **magic** [1045]. **magnetic** [1437, 1543]. **magnetodynamic** [687]. **magnetohydrodynamics** [807, 829, 1886]. **magnetostriction** [202]. **Magnus** [347, 346, 692, 1498]. **Magnus-type** [692]. **majorant** [971, 972]. **MALA** [382]. **Malliavin** [1762]. **managed** [1342]. **manifold** [609, 773, 1289, 1664, 1973, 2203]. **manifold-based** [609]. **manifold-valued** [2203]. **manifolds** [24, 189, 247, 393, 394, 732, 757, 833, 972, 1143, 1196, 1331, 1381, 1521, 1584, 1727, 1732, 1768, 1855, 2171, 2115]. **many** [953]. **map** [203, 256]. **mapping** [559, 1016, 1436, 1510]. **mappings** [654, 883, 1976, 1977, 2003, 2144]. **maps** [113, 1477, 1647]. **Maratos** [612]. **marching** [1200, 1893]. **Markov** [340, 652, 1492, 1504]. **Markovian** [2068]. **Marquardt** [1503]. **Martingale** [1847]. **Maruyama** [1483, 1544, 1764, 1767]. **Mason** [1814]. **mass** [149, 1015, 1047, 1057, 1107, 1572, 1569, 1772, 1890, 2160]. **mass-preserving** [1572, 1569]. **matching** [547]. **material** [1191]. **materials** [217, 2011]. **Mathematical** [1227]. **matrices** [39, 166, 284, 375, 406, 565, 598, 617, 631, 681, 841, 1905, 954, 1117, 1185, 1291, 1334, 1607, 1668, 1863, 2038, 2056, 2101, 2116, 2117, 2155, 2168, 2185, 2187, 2210, 745, 748]. **Matrix** [583, 832, 1683, 28, 52, 73, 185, 204, 229, 365, 378, 426, 550, 698, 838, 843, 951, 954, 956, 1021, 1067, 1106, 1166, 1213, 1248, 1246, 1311, 1315, 1353, 1375, 1374, 1450, 1553, 1576, 1693, 1877, 1881, 1912, 1982, 1996, 2003, 2100, 2102, 2147, 2160, 2166, 2181, 2251, 2252, 2253]. **matrix-fracture** [426]. **matrix-inverse** [2003]. **Maximal** [1447, 1515, 473]. **Maximum** [42, 130, 772, 811, 1442, 1675, 1910, 940, 1408, 1566, 2234]. **Maximum-norm** [1675, 1566]. **Maxwell** [353, 355, 354, 361, 390, 509, 626, 635, 687, 835, 855, 1049, 1147, 1362, 1486, 1530, 1551, 1573, 1608, 1613, 1609, 1889, 2103]. **Maxwell-type** [635]. **McKean** [213, 605, 1544, 1902, 817]. **Mean** [589, 235, 341, 897, 892, 923, 964, 1311, 1465, 1574, 2044, 2221]. **mean-field** [2221]. **Mean-square** [589]. **means** [91, 1900]. **measure** [399, 849]. **measurements**

- [283, 1214, 1394]. **measures** [13, 1808].
mechanical [447, 1560]. **media**
 [25, 193, 305, 361, 426, 427, 520, 521, 759,
 1050, 1052, 1382, 1486, 1506, 1551, 1890].
medium [425, 1496]. **Medius** [528]. **Mellin**
 [1894]. **membrane** [234]. **membranes**
 [290, 1985]. **memory**
 [155, 700, 701, 1150, 1159, 1621, 2224]. **Mesh**
 [2182, 23, 128, 170, 642, 847, 850, 873, 969,
 1157, 1170, 1562, 1574, 1615, 1677, 2249].
mesh-free [873]. **mesh-independent**
 [170, 1574]. **Meshes**
 [1096, 25, 36, 55, 90, 130, 127, 223, 237, 324,
 364, 403, 424, 439, 452, 547, 596, 606, 644, 782,
 781, 854, 913, 920, 921, 994, 1118, 1287, 1470,
 1471, 1484, 1565, 1577, 1581, 1601, 1690, 1707,
 1885, 1888, 1917, 1966, 1974, 2018, 2046, 2088,
 2130, 2189, 2211, 2217, 2218, 2219, 2242].
Meshing [88]. **metastable** [525, 2054].
Method
 [30, 1096, 1313, 4, 7, 11, 12, 20, 24, 43, 47, 62,
 69, 77, 111, 120, 122, 124, 128, 127, 134, 135,
 138, 142, 146, 154, 160, 158, 169, 168, 170,
 177, 178, 191, 194, 189, 212, 221, 237, 225,
 224, 236, 275, 276, 293, 300, 302, 303, 308,
 321, 324, 332, 335, 338, 337, 339, 342, 349,
 350, 358, 359, 367, 368, 389, 390, 392, 400, 407,
 428, 479, 482, 480, 478, 483, 493, 504, 512, 524,
 534, 539, 542, 553, 559, 568, 573, 574, 578, 579,
 595, 583, 607, 594, 602, 592, 589, 590, 591].
method
 [612, 613, 615, 619, 620, 623, 629, 631, 636,
 637, 645, 674, 696, 700, 719, 721, 722, 720,
 724, 737, 749, 755, 757, 759, 761, 762, 773,
 784, 791, 792, 805, 806, 818, 819, 823, 826,
 836, 855, 869, 870, 873, 878, 881, 882, 885, 886,
 887, 904, 910, 911, 914, 917, 925, 924, 929, 933,
 932, 934, 942, 941, 943, 944, 957, 959, 960, 962,
 967, 963, 971, 972, 990, 1001, 1007, 1011, 1014,
 1018, 1021, 1027, 1032, 1033, 1035, 1038, 1041,
 1044, 1050, 1051, 1053, 1065, 1068, 1071, 1079,
 1082, 1090, 1100, 1101, 1105, 1112, 1124].
method
 [1131, 1130, 1138, 1147, 1150, 1151, 1154,
 1163, 1165, 1171, 1172, 1175, 1178, 1184,
 1189, 1198, 1200, 1202, 1206, 1208, 1219,
 1217, 1216, 1224, 1225, 1234, 1239, 1240,
 1241, 1259, 1265, 1268, 1272, 1299, 1297,
 1298, 1292, 1300, 1293, 1311, 1317, 1341,
 1343, 1350, 1358, 1360, 1362, 1365, 1370,
 1368, 1380, 1382, 1388, 1390, 1391, 1401, 1402,
 1411, 1410, 1418, 1422, 1425, 1426, 1429, 1436,
 1445, 1450, 1461, 1463, 1464, 1469, 1480, 1490,
 1493, 1500, 1501, 1503, 1510, 1520, 1525, 1526,
 1521, 1540, 1530, 1541, 1524, 1547, 1558, 1557,
 1562, 1568, 1569, 1576, 1578, 1573, 1574, 1599,
 1600, 1602, 1603, 1605, 1604, 1610, 1608].
method
 [1609, 1618, 1624, 1637, 1639, 1650, 1655,
 1662, 1669, 1673, 1677, 1689, 1692, 1690, 1697,
 1698, 1708, 1721, 1724, 1728, 1736, 1739, 1745,
 1749, 1754, 1751, 1753, 1763, 1770, 1772, 1776,
 1775, 1796, 1781, 1788, 1799, 1800, 1804, 1809,
 1815, 1817, 1821, 1835, 1838, 1848, 1849, 1852,
 1856, 1857, 1870, 1871, 1872, 1882, 1883, 1884,
 1885, 1886, 1888, 1893, 1896, 1898, 1924, 1930,
 1931, 1933, 1945, 1963, 1976, 1977, 1986, 1993,
 1999, 2002, 2009, 2007, 2008, 2010, 2014, 2016,
 2018, 2019, 2026, 2041, 2046, 2045, 2047, 2063,
 2064, 2070, 2126, 2131, 2154, 2149, 2144, 2159,
 2151, 2157, 2138, 2165, 2169, 2199, 2206].
method [2204, 2209, 2207, 2216, 2217, 2221,
 2230, 2235, 2236, 2243, 2245, 2242, 2249,
 2254, 713, 738, 2129]. **methodology** [2].
Methods
 [550, 832, 1006, 18, 45, 40, 56, 57, 63, 64, 76,
 79, 81, 80, 123, 125, 126, 140, 145, 148, 150,
 156, 171, 179, 185, 183, 188, 187, 186, 190,
 192, 196, 209, 215, 219, 226, 239, 261, 264,
 269, 278, 280, 279, 281, 287, 291, 298, 322,
 328, 327, 336, 343, 354, 357, 361, 363, 365,
 374, 396, 404, 409, 429, 432, 439, 447, 449, 452,
 460, 472, 475, 481, 484, 485, 486, 487, 489, 490,
 500, 502, 501, 505, 506, 510, 513, 514, 516, 515,
 517, 519, 528, 533, 531, 552, 564, 569, 580].
methods
 [581, 585, 611, 599, 606, 584, 588, 614, 648,
 647, 646, 652, 658, 659, 661, 660, 671, 667,

668, 669, 670, 679, 683, 685, 694, 697, 705, 716, 715, 736, 744, 756, 758, 782, 793, 794, 797, 808, 812, 816, 825, 850, 879, 880, 883, 901, 905, 928, 930, 938, 949, 952, 956, 962, 964, 966, 968, 969, 976, 987, 995, 993, 1004, 1005, 1008, 1016, 1036, 1058, 1063, 1060, 1070, 1086, 1094, 1127, 1128, 1132, 1140, 1152, 1158, 1157, 1168, 1177, 1182, 1192, 1191, 1203, 1226, 1242, 1261, 1273, 1277, 1281, 1283, 1285, 1295, 1296, 1294, 1303, 1304].

methods
[1329, 1321, 1323, 1325, 1328, 1331, 1339, 1344, 1366, 1376, 1377, 1395, 1394, 1400, 1403, 1404, 1427, 1454, 1456, 1460, 1468, 1474, 1478, 1482, 1485, 1487, 1491, 1496, 1505, 1506, 1529, 1538, 1539, 1515, 1528, 1545, 1518, 1516, 1535, 1548, 1550, 1552, 1559, 1575, 1571, 1586, 1590, 1594, 1596, 1611, 1614, 1623, 1625, 1627, 1628, 1629, 1630, 1632, 1633, 1643, 1646, 1648, 1651, 1658, 1663, 1668, 1686, 1684, 1691, 1699, 1702, 1704, 1710, 1717, 1742, 1755, 1761, 1766, 1779, 1780, 1785, 1787, 1806, 1818, 1820, 1824, 1853, 1862, 1878, 1892, 1907, 1921, 1929, 1936, 1938, 1939, 1944, 1955, 1958].

methods
[1961, 1969, 1970, 1972, 1978, 1979, 1980, 1984, 1991, 1997, 1998, 2006, 2020, 2021, 2025, 2030, 2031, 2040, 2042, 2050, 2049, 2067, 2068, 2078, 2082, 2104, 2119, 2125, 2133, 2142, 2155, 2141, 2135, 2145, 2136, 2137, 2150, 2163, 2172, 2173, 2183, 2195, 2186, 2200, 2201, 2205, 2218, 2219, 2223, 2225, 2226, 2232, 2237, 2233, 2247, 2250, 778, 710, 746, 1318, 2072, 2111, 2105, 2106, 2107, 2110, 2108, 2109, 639].

methods-overcoming [1226]. **metric**
[81, 569, 704, 2228]. **MHD**
[1220, 1543, 1895]. **MHM** [1096]. **MHSS**
[187]. **micromagnetism** [852]. **midpoint**
[1342, 1622]. **mild** [125, 440]. **mild-weak**
[440]. **Milstein** [213]. **mimetic** [710]. **mini**
[167]. **mini-element** [167]. **Minimal**
[2238, 179, 294, 1350, 1354, 1573, 1744].

minimax [735, 1652, 2251]. **minimization**
[252, 259, 279, 287, 529, 722, 1128, 1129, 1216, 1428, 1625, 1861, 1968, 2066, 2079, 2082].

minimizers [2249]. **minimizing**
[280, 1398, 1399]. **minimum**
[285, 771, 1300, 1932]. **misaligned** [608].

miscible [759]. **Mitchell** [1141]. **Mixed**
[72, 307, 726, 1116, 1641, 1642, 1690, 1710, 1914, 1966, 10, 35, 62, 69, 140, 194, 212, 248, 300, 303, 308, 312, 320, 371, 410, 425, 440, 493, 504, 530, 543, 544, 545, 575, 759, 782, 784, 823, 826, 830, 850, 869, 942, 941, 943, 962, 967, 966, 1022, 1027, 1050, 1051, 1082, 1107, 1348, 1356, 1411, 1421, 1476, 1486, 1545, 1532, 1573, 1684, 1818, 1858, 1886, 1964, 1970, 2035, 2198].

mixed-dimensional [425]. **mixed-primal**
[69]. **mixing** [382]. **mobility** [229]. **mode**
[156, 2193]. **model**
[13, 24, 68, 77, 228, 229, 230, 233, 255, 302, 309, 305, 330, 342, 352, 366, 376, 425, 508, 520, 533, 548, 555, 610, 622, 630, 828, 897, 888, 890, 963, 1047, 1072, 1178, 1418, 1459, 1531, 1545, 1532, 1533, 1558, 1559, 1564, 1582, 1612, 1615, 1641, 1695, 1700, 1819, 1897, 1936, 1973, 2011, 2044, 2156, 2224, 232].

modeled [79]. **Modeling** [2021, 1490].

modelling [38, 180, 707, 1057, 1930, 1985].

models [34, 249, 415, 651, 831, 857, 894, 1066, 1132, 1904, 1920]. **modes** [1235].

Modification [1226, 925, 1636].

modifications [1830]. **modified**
[196, 609, 588, 1080, 1103, 1150, 1339, 1350, 1557, 1561, 1650, 1779, 2016, 2229, 2235, 2111, 1335, 2197]. **Modulated** [1939, 1263].

modulus [795]. **molecular** [1502, 2097].

mollification [14]. **Mollifications** [1192].

Moment [371, 1793, 1538, 1539, 1623].

Moment-free [1793]. **Monge** [164, 1775].

Mono [541]. **Mono-implicit** [541].

monodromy [844]. **Monolithic** [521].

Monotone [1638, 185, 379, 664, 1146, 1155, 1529, 1579, 1612, 1703, 2063, 2123].

monotonic [709, 765, 766, 1135, 2207].

monotonicity [770]. **Monotonous** [50].

monotony [881]. **monotony-preserving**
[881]. **Monte** [213, 683, 1075, 1076, 1093,

1416, 1478, 1504, 1624, 1840]. **Morley** [1018, 2209]. **Morse** [599]. **mortar** [169, 168, 276, 306, 390, 1224, 1288, 1298]. **mortaring** [1225]. **Morton** [1459]. **motion** [342, 522, 1780, 1819]. **motions** [1267]. **motivated** [1044, 1150]. **moving** [847, 893, 944, 1270, 1364, 1365, 1615, 1709, 1718, 2161, 2174, 2129]. **moving-boundary** [893]. **MPFA** [520]. **MR** [581, 658, 815, 879, 1630, 2031]. **Multi** [620, 1571, 41, 182, 228, 229, 230, 352, 1216, 1270, 1434, 1569, 1987, 2198]. **multi-block** [1216]. **multi-component** [228, 229, 230, 352]. **multi-configuration** [1434]. **multi-dimensional** [41, 1569, 1987]. **multi-grid** [1270]. **multi-level** [2198]. **Multi-product** [620]. **Multi-symplectic** [1571, 182]. **multicomponent** [171, 1127]. **Multidimensional** [1511, 446, 831, 944, 1020, 1872, 1919, 1950]. **multidomain** [1013, 1677]. **multifacility** [734]. **Multigrid** [645, 2025, 178, 899, 949, 1105, 1108, 1128, 1260, 1264, 1316, 1591, 1592, 1838, 2124, 2195, 2230, 2247]. **multigrid-type** [1105]. **multilag** [196, 1339]. **Multilevel** [166, 176, 439, 948, 996, 1075, 1076, 213, 323, 769, 1807, 2204]. **multiparameter** [444]. **multiphase** [1073]. **multiphysics** [963]. **Multiple** [1504, 4, 48, 208, 277, 644, 718, 1071, 1283, 1537, 1685, 1712, 1827, 2017, 2051, 2206]. **Multiplicative** [1877, 150, 790, 907, 965, 1460, 1572, 1589]. **multiplier** [95, 481]. **multipliers** [118, 358, 1288, 1503]. **multiply** [1436]. **multiply-connected** [1436]. **multipole** [1781]. **multiprocessor** [560]. **multiquadric** [265, 953]. **multiquadrics** [465]. **Multiresolution** [1238]. **Multiscale** [614, 4, 136, 220, 447, 635, 875, 1057, 1279, 1522, 1939, 2063, 2186, 2199]. **multisplitting** [185]. **multistate** [1531]. **Multistep** [515, 1251, 1322, 1331, 40, 209, 396, 516, 675, 761, 1343, 1515, 1594, 1596, 1787, 1968, 2068, 2105, 2107]. **multivalued** [487]. **multivalued** [1703]. **Multivariate** [1704, 679, 783, 1058, 1144, 1336, 2179]. **Mysovskii** [145]. **Naghdi** [309]. **Nagumo** [77]. **narrow** [596, 749]. **Natural** [325, 198, 1903]. **Navier** [776, 11, 30, 29, 122, 135, 167, 180, 263, 308, 304, 307, 326, 422, 504, 943, 957, 959, 1019, 1034, 1035, 1036, 1162, 1200, 1219, 1253, 1272, 1386, 1476, 1524, 1532, 1603, 1634, 1763, 1833, 1885, 1888, 747, 1964, 2015, 712, 272, 740]. **Near** [294, 1652, 1653, 1654, 1812, 1969]. **Near-best** [1653, 1654, 1812]. **Near-minimal** [294]. **Near-minimax** [1652]. **nearest** [378, 689, 1246, 1881]. **nearly** [949, 962, 1484, 1871, 1872, 2056]. **nearness** [52]. **necessity** [320]. **negative** [365, 395, 1008]. **nematic** [201]. **nested** [1655]. **nets** [1092]. **network** [551, 912, 1102, 1145, 1396]. **networks** [867, 868, 1396, 1555, 1719, 1720, 747]. **Neumann** [131, 130, 177, 181, 203, 237, 241, 277, 317, 384, 554, 932, 974, 1647, 1715, 2088, 2148, 2176]. **neural** [551, 912, 1102, 1145, 1396, 1555, 1719, 1720, 747]. **neural-network** [551]. **neutral** [50, 466]. **neutron** [1624]. **newest** [1042]. **Newton** [20, 24, 43, 74, 145, 150, 184, 280, 350, 363, 378, 379, 407, 595, 703, 757, 904, 924, 960, 971, 972, 1127, 1128, 1130, 1172, 1175, 1394, 1444, 1450, 1492, 1521, 1517, 1557, 1739, 1796, 1976, 2154, 2144, 2169, 2183, 2190, 2220, 2239, 2240, 2114]. **Newton-CG** [2220]. **Newton-like** [145]. **Newton-Mysovskii-type** [145]. **Newton-type** [1394]. **Newtonian** [314, 315, 542, 664]. **Newtonlike** [2225]. **NEWUOA** [1861]. **Nicolson** [1114, 1368, 1608, 1903, 2208]. **Nirenberg** [498]. **Nitsche** [359, 480, 539, 623, 1224, 1225]. **no** [581, 658, 798, 815, 838, 843, 879, 1630, 2031]. **no-fill** [838, 843]. **Nodal** [90, 256]. **nodally**

[221]. **nodes** [36, 473, 906, 1712, 2029, 2028, 2091]. **noise** [125, 362, 907, 965, 1214, 1397, 1438, 1439, 1460, 1572, 1579, 1589, 1626, 1735, 1873, 2151]. **noisy** [172, 902]. **Non** [391, 1375, 1555, 1806, 15, 128, 162, 262, 365, 490, 542, 547, 802, 819, 877, 1033, 1178, 1214, 1301, 1358, 1374, 1381, 1492, 1556, 1557, 1597, 1602, 1611, 1641, 1647, 1683, 1703, 1761, 1770, 2011, 2138, 2175, 2249, 740]. **Non-asymptotic** [1555]. **Non-autonomous** [1375]. **non-conforming** [128, 877, 1556, 1770]. **non-convex** [1555]. **non-Fickian** [262]. **non-Gaussian** [1214]. **non-globally** [1358]. **non-interior** [1301]. **non-linear** [162, 490, 819, 1033, 1492, 1597, 1641, 2011]. **non-Lipschitz** [15, 2175]. **non-local** [1178]. **non-matching** [547]. **non-monotone** [1703]. **non-negative** [365]. **non-Newtonian** [542]. **non-overlapping** [1602]. **non-periodic** [194]. **non-self-adjoint** [1647, 2138]. **non-separable** [1761]. **Non-smooth** [1806, 1381, 2249]. **non-standard** [1611]. **non-stationary** [802]. **non-symmetric** [1374, 1557, 1683]. **Non-variational** [391]. **Nonasymptotic** [382]. **Nonautonomous** [396, 347, 346, 620, 811, 1296, 1432]. **noncoercive** [554]. **noncompact** [563, 1656]. **Nonconforming** [527, 532, 1797, 33, 127, 248, 514, 546, 606, 724, 758, 921, 1255, 1285, 1378, 1527, 1708, 1906, 2046, 2137, 2209]. **nonconservative** [1942]. **nonconstant** [1317]. **noncontractive** [1850]. **nonconvex** [87, 393, 394, 536, 703, 1124, 1130, 1414, 1599, 2082, 2171]. **nondefectivity** [2117]. **nondiscrete** [1553]. **nondivergence** [1481]. **nondivergence-form** [1481]. **nonequilibrium** [1502]. **nonglobally** [2146]. **nonhomogeneous** [16, 933]. **Nonlinear** [1887, 742, 6, 25, 32, 42, 40, 69, 84, 90, 132, 158, 182, 181, 215, 278, 305, 316, 321, 327, 379, 436, 441, 510, 518, 585, 611, 629, 666, 670, 673, 699, 702, 725, 741, 775, 802, 853, 855, 858, 919, 929, 940, 942, 956, 960, 976, 1007, 1023, 1024, 1027, 1039, 1048, 1052, 1054, 1055, 1131, 1139, 1148, 1152, 1175, 1183, 1207, 1229, 1230, 1262, 1263, 1265, 1320, 1323, 1342, 1348, 1350, 1390, 1389, 1402, 1408, 1413, 1417, 1447, 1529, 1533, 1547, 1554, 1585, 1679, 1681, 1682, 1691, 1701, 1714, 1715, 1746, 1750, 1772, 1785, 1815, 1856]. **nonlinear** [1864, 1884, 1892, 1942, 1962, 2012, 2021, 2058, 2063, 2089, 2090, 2123, 2134, 2156, 2183, 2209, 2222, 2239, 2233, 2251]. **nonlinearities** [1358, 1890]. **nonlinearity** [532]. **Nonlocal** [17, 349, 26, 77, 573, 600, 831, 927, 1179, 1351, 1536, 2143]. **nonmatching** [140, 403]. **nonmonotone** [613, 1311]. **nonnegative** [561, 695, 1197, 1883]. **nonnormality** [331]. **nonoscillatory** [423]. **Nonoverlapping** [401, 2226, 2215]. **nonperiodic** [1822]. **nonpolygonal** [37]. **nonpositive** [700]. **nonresidual** [540]. **nonself** [374]. **nonself-adjoint** [374]. **Nonselfadjoint** [639]. **Nonsimple** [2027]. **nonsingular** [1117]. **nonsingularity** [2117]. **Nonsmooth** [1127, 1143, 1399, 1621, 155, 342, 538, 597, 704, 705, 730, 773, 1007, 1128, 1129, 1227, 1289, 1367, 1428, 1429, 1727, 2184, 2197, 2227, 2072, 1398]. **nonstandard** [1153]. **nonstationary** [358, 513, 1916]. **nonstiff** [1787]. **nonsymmetric** [455, 456, 1167, 1531]. **nonuniform** [36, 642, 1391, 1393]. **nonuniformly** [379]. **nonunisolvent** [537]. **norm** [42, 116, 130, 351, 607, 772, 786, 811, 928, 980, 1147, 1207, 1442, 1559, 1566, 1675, 1721, 1932, 2003]. **normal** [750, 1291, 1416]. **normalized** [937, 1535]. **norms** [28, 147, 683, 725, 909, 1067, 1129, 1925, 2181]. **note** [322, 410, 470, 647, 653, 838, 843, 1063, 1305, 1526, 1917, 1941, 2067]. **novel**

[111, 1698, 2149]. **nuclear** [622]. **number** [177, 284, 285, 384, 419, 944, 2188]. **numbers** [617, 1734, 2187]. **Numer** [581, 658, 815, 879, 1630, 2031]. **numerator** [764]. **Numerical** [3, 38, 137, 156, 193, 201, 200, 217, 243, 249, 244, 247, 283, 302, 301, 334, 352, 362, 369, 370, 367, 422, 494, 525, 543, 597, 611, 595, 650, 652, 658, 659, 662, 688, 707, 708, 834, 897, 890, 896, 913, 974, 995, 998, 1004, 1015, 1022, 1030, 1054, 1069, 1197, 1199, 1248, 1269, 1345, 1373, 1385, 1424, 1425, 1448, 1450, 1452, 1459, 1494, 1528, 1537, 1586, 1714, 1780, 1851, 1900, 2029, 2028, 2054, 2122, 2123, 2163, 2201, 17, 90, 157, 159, 162, 161, 163, 164, 180, 182, 256, 282, 290, 326, 333, 339, 356, 372, 376]. **numerical** [407, 406, 444, 448, 457, 508, 516, 538, 541, 559, 565, 567, 599, 603, 624, 638, 655, 689, 696, 755, 819, 828, 825, 849, 850, 853, 886, 957, 958, 973, 989, 993, 1016, 1019, 1048, 1068, 1076, 1134, 1140, 1160, 1159, 1218, 1247, 1254, 1272, 1293, 1303, 1312, 1317, 1323, 1332, 1333, 1358, 1375, 1390, 1398, 1399, 1439, 1474, 1498, 1538, 1539, 1543, 1536, 1563, 1575, 1582, 1585, 1588, 1612, 1618, 1629, 1630, 1658, 1672, 1675, 1676, 1693, 1725, 1726, 1744, 1754, 1752, 1769, 1793, 1821, 1868, 1894, 1897, 1915, 1935, 1948, 1952, 1953, 1961, 1962, 1978, 1997]. **numerical** [1996, 1998, 1999, 2005, 2020, 2064, 2094, 2096, 2124, 2127, 2143, 2186, 778, 2114, 2111]. **numerical-analysis-focused** [508]. **Numerically** [1094, 745, 863, 1192, 1191, 1249]. **numerics** [871, 1148]. **Nyström** [737, 1656, 385, 813, 814, 815, 819, 1121, 1427, 1657, 1870, 1984]. **Nyström-product** [1121]. **O.D.E.** [562]. **obeying** [193]. **observability** [913]. **observation** [52]. **obstacle** [257, 360, 527, 752, 2136, 738]. **obstacles** [1071, 1868]. **obtain** [2104]. **obtaining** [1799]. **ODE** [698, 1981, 2127]. **ODEs** [412, 904, 1787, 1884, 1979, 1980, 2232]. **Oldroyd** [342, 1819]. **One** [1968, 2039, 48, 119, 181, 222, 321, 342, 407, 437, 553, 607, 656, 725, 886, 913, 1000, 1017, 1032, 1040, 1149, 1157, 1184, 1364, 1495, 1498, 1531, 1614, 1689, 1692, 1767, 1803, 1816, 1867, 1974, 2044, 2056, 1762]. **one-dimension** [2044]. **one-dimensional** [119, 181, 407, 437, 553, 656, 913, 1000, 1032, 1364, 1498, 1531, 1614, 1767, 1867, 1974]. **one-leg** [1157]. **One-shot** [2039]. **One-step** [1968, 886, 1149, 1184, 1495]. **only** [2227]. **onto** [20, 55]. **open** [2213]. **operations** [1790]. **Operator** [344, 1730, 169, 168, 356, 364, 482, 563, 620, 636, 716, 825, 954, 1018, 1041, 1152, 1207, 1204, 1215, 1395, 1551, 1656, 1723, 1729, 1739, 2026]. **operators** [9, 88, 169, 168, 212, 324, 331, 369, 370, 384, 391, 453, 511, 627, 633, 693, 834, 833, 916, 920, 939, 1009, 1010, 1024, 1110, 1155, 1288, 1390, 1449, 1513, 1663, 1664, 1707, 1734, 1850, 1892, 1899, 2034, 2040, 2093]. **optical** [1192, 1191]. **Optimal** [22, 54, 226, 225, 224, 315, 377, 403, 414, 434, 491, 731, 779, 792, 807, 849, 852, 903, 1027, 1042, 1065, 1093, 1216, 1267, 1313, 1365, 1460, 1518, 1561, 1911, 1922, 1925, 2020, 2051, 2090, 2139, 2194, 2223, 743, 2248, 115, 142, 263, 429, 440, 455, 456, 538, 585, 595, 618, 718, 802, 911, 908, 1024, 1147, 1174, 1188, 1369, 1456, 1457, 1458, 1534, 1684, 1807, 1808, 1832, 1891, 2168, 2218]. **Optimal-order** [2248, 2218]. **Optimal-rate** [1922]. **Optimality** [275, 82, 83, 271, 323, 1028, 1227]. **Optimally** [966]. **optimization** [2, 57, 81, 82, 83, 116, 170, 274, 363, 393, 394, 536, 612, 665, 702, 703, 704, 720, 773, 882, 902, 1124, 1131, 1130, 1175, 1289, 1357, 1429, 1519, 1576, 1599, 1727, 1761, 1796, 1862, 1883, 1950, 2017, 2021, 2039, 2100, 2144, 2171, 2184, 2205, 2227, 2229]. **Optimized** [639, 793, 794]. **option** [1851, 2149]. **options** [1292]. **orbits**

- [333, 334, 516, 998, 1731, 1969]. **Order** [472, 487, 660, 762, 1330, 23, 29, 36, 53, 59, 63, 64, 67, 82, 83, 94, 121, 135, 149, 223, 263, 288, 289, 298, 319, 335, 338, 342, 347, 346, 357, 361, 375, 377, 385, 478, 491, 501, 515, 522, 518, 524, 528, 533, 539, 570, 578, 585, 607, 592, 590, 684, 692, 724, 744, 758, 767, 780, 782, 781, 784, 786, 800, 805, 808, 814, 815, 820, 826, 829, 830, 879, 880, 905, 909, 911, 965, 979, 984, 1000, 1017, 1034, 1035, 1038, 1040, 1061, 1086, 1089, 1093, 1092, 1097, 1109, 1134, 1154, 1184, 1185, 1194]. **order** [1215, 1226, 1228, 1231, 1261, 1277, 1278, 1285, 1286, 1314, 1316, 1340, 1343, 1383, 1404, 1437, 1445, 1446, 1467, 1487, 1490, 1501, 1505, 1513, 1527, 1541, 1536, 1542, 1559, 1556, 1564, 1566, 1574, 1587, 1616, 1628, 1632, 1638, 1675, 1692, 1695, 1700, 1722, 1736, 1749, 1754, 1752, 1774, 1836, 1853, 1933, 1934, 1972, 1978, 1999, 2010, 2036, 2050, 2049, 2125, 2156, 2143, 2190, 2191, 2186, 2194, 2203, 2207, 2218, 2219, 2222, 2228, 2231, 2236, 2244, 2243, 2248, 711, 2115, 2108, 542]. **order-one** [1017]. **orders** [445, 1499, 1984]. **ordinary** [121, 225, 487, 886, 989, 1077, 1149, 1194, 1241, 1323, 1359, 1546, 1563, 1899, 2096, 2178]. **orientation** [922]. **oriented** [686]. **origin** [1291]. **Orthogonal** [1023, 1244, 1794, 338, 507, 601, 915, 1163, 1309, 1820, 1883, 1937, 1992, 2163, 2169]. **orthonormal** [754, 753]. **orthonormalization** [1436]. **orthonormalizing** [1104]. **oscillating** [1332, 1333]. **Oscillation** [1134, 21, 1307, 1308, 1335, 1336]. **oscillators** [1333]. **oscillatory** [153, 447, 453, 460, 570, 655, 799, 804, 1269, 1793, 1943, 1993, 2141, 2200, 2201]. **Oseen** [723, 994, 1666, 2095]. **other** [2056]. **outflow** [1476]. **output** [1699, 1921]. **overall** [455, 456]. **Overcoming** [1379, 1226]. **overdamped** [1441]. **overdetermined** [678, 1212, 1864, 2165]. **Overflow** [961]. **Overlapping** [374, 848, 1550, 1602, 2192]. **overrelaxation** [1208, 1650]. **P** [232, 1539, 233]. **p.d.e.s** [1078, 322]. **packet** [111, 296, 936, 1698]. **Padé** [833]. **Padé-parametric** [833]. **pair** [223]. **pairs** [1466, 1484, 2058]. **panel** [616, 1452]. **pantograph** [552, 1157, 1296]. **paper** [369, 1230]. **parabolic** [5, 14, 45, 42, 40, 66, 67, 74, 86, 144, 200, 238, 316, 321, 322, 347, 421, 420, 551, 572, 642, 777, 862, 909, 930, 938, 939, 940, 973, 1026, 1044, 1064, 1074, 1082, 1098, 1174, 1205, 1228, 1385, 1390, 1389, 1405, 1406, 1413, 1409, 1448, 1445, 1446, 1482, 1515, 1518, 1542, 1566, 1597, 1598, 1615, 1679, 1688, 1714, 1715, 1716, 1772, 1784, 1817, 1818, 1820, 1898, 1921, 1931, 1978, 1986, 2002, 2035, 2057, 2126, 2172, 2214, 2217, 2218, 2219, 2254, 2115, 2110]. **Parallel** [209, 991, 1262, 1055, 1215, 1325, 1986, 2155, 2215]. **Parameter** [1005, 1546, 1858, 39, 339, 1021, 1371, 1536, 1848]. **parameter-dependent** [39]. **Parameter-free** [1005, 1858]. **parameterized** [912, 1164, 1163]. **parameters** [766, 774, 775]. **Parametric** [175, 1045, 198, 833, 1518, 2245]. **parametrization** [1731]. **parametrized** [549]. **parareal** [2191]. **part** [763, 789, 898, 1517, 2053, 2190, 2240, 746, 169, 168, 290, 439, 511, 606, 857, 928, 1872, 2188]. **Partial** [1313, 1, 200, 515, 715, 895, 889, 905, 911, 912, 992, 1004, 1139, 1148, 1275, 1419, 1422, 1431, 1460, 1510, 1579, 1670, 1817, 1818, 1820, 1907, 1989, 2042]. **partially** [305, 1168]. **particle** [213, 605, 2221]. **particular** [159]. **partition** [873]. **Partitioned** [1895]. **Partitioning** [2173, 1222, 1241]. **partitions** [191, 411, 1578, 2023]. **Pasteur** [1551]. **patch** [198]. **patches** [947]. **path** [20, 1860]. **path-following** [20]. **Pathwise** [1769]. **PDE** [57, 116, 170, 236, 618, 940, 1066, 1175, 1615, 1626, 2039, 1319]. **PDE-constrained**

[57, 116, 170, 1175, 2039]. **PDEs** [5, 54, 175, 362, 434, 442, 455, 456, 503, 572, 614, 657, 1026, 1145, 1277, 1278, 1394, 1416, 1447, 1588, 1647, 1705, 1719, 1720, 1851, 2172, 2206]. **Peclet** [944]. **penalization** [1603]. **penalized** [1168]. **penalty** [219, 359, 428, 479, 481, 591, 612, 702, 792, 856, 877, 964, 1007, 1036, 1065, 1063, 1113, 1125, 1147, 1151, 1154, 1198, 1300, 1428, 1506, 1576, 1883]. **penalty-free** [359, 612]. **pencils** [94, 356]. **Penrose** [1430]. **Penrose-Fife** [1430]. **perfect** [1516, 1661, 1757, 1758]. **perfectly** [386]. **Performance** [1167, 2212]. **period** [904, 1962]. **Periodic** [837, 1142, 194, 516, 768, 1139, 1343, 1731, 1798, 1969, 2039, 2043, 2156, 2150, 2107, 2108]. **periodic/non** [194]. **periodic/non-periodic** [194]. **permutations** [1829]. **perovskite** [3]. **Persistence** [1149]. **perturbation** [566, 1228, 1951, 2037, 2051, 2166, 2216]. **perturbations** [2118]. **perturbed** [74, 92, 166, 479, 553, 582, 850, 950, 1442, 1443, 1463, 1471, 1485, 1565, 1568, 1600, 1618, 1685, 1702, 1708, 1707, 2050, 2049, 2055, 2126, 2130]. **Petrov** [23, 226, 337, 440, 777, 1708, 1743, 1961]. **PH** [946]. **phase** [25, 45, 228, 229, 230, 245, 236, 352, 423, 427, 520, 610, 725, 730, 818, 847, 1000, 1037, 1047, 1270, 1382, 1418, 1430, 1547, 1558, 1559, 1639, 1738, 1815, 1816, 1878, 1890]. **phase-field** [1418, 1430]. **phase-function** [1878]. **phenomenon** [1849]. **physics** [912, 1719, 1720, 1847, 747]. **physics-informed** [912, 1719, 1720, 747]. **Picard** [572, 904, 1310]. **Piecewise** [495, 1135, 1810, 70, 71, 600, 652, 770, 860, 1512, 1567, 1707, 1860, 2059, 1067]. **Piecewise-smooth** [1810, 71, 1567]. **piecewise-uniform** [1707]. **piezoelectric** [114]. **PIN** [38]. **pipe** [867, 868]. **Pitaevskii** [800, 858, 1053]. **Pitaevskii-type** [858]. **Pivoting** [1831]. **Plain** [1025]. **planar** [161, 332, 567, 998, 1620]. **Planck** [1284, 1293, 1752]. **plane** [243, 857, 983, 984, 1317, 1320, 1402, 1976, 2140]. **plane-wave** [857, 1317]. **planewave** [511]. **plans** [1534]. **plasma** [242]. **plate** [257, 1105, 1868, 2020, 2131, 2137]. **plates** [367, 368]. **plating** [1084]. **Plemmons** [1636]. **plotting** [412]. **plus** [265, 890]. **Poincaré** [1288, 1828, 2120]. **point** [7, 60, 188, 186, 210, 261, 334, 336, 340, 357, 405, 578, 579, 644, 878, 944, 961, 1007, 1039, 1045, 1048, 1052, 1094, 1146, 1234, 1280, 1521, 1702, 1748, 1827, 1904, 2010, 2017, 2045, 2050, 2049, 2103, 2130, 2147, 2193, 2216, 745]. **points** [19, 163, 434, 608, 904, 978, 1138, 1346, 1345, 1347, 1458, 1472, 1473, 1729, 1869, 1952, 2027, 2030, 2031, 2071, 2100, 2218]. **Pointwise** [1170, 1369, 1443, 1461, 738, 22, 54, 429, 503, 538, 714, 798, 1316, 1462, 1775, 2148]. **Pointwise-in-time** [1369]. **pointwise-integral** [538]. **Poisson** [139, 159, 218, 418, 533, 806, 931, 974, 987, 1207, 1456, 1480, 1556, 1671, 1722, 1837, 2246]. **Poisson-Neumann** [974]. **Poisson-type** [1480]. **Polak** [2235]. **polar** [1722]. **pole** [1480]. **poles** [753]. **pollution** [729, 1513, 1647]. **Pólya** [267]. **Polyak** [2235]. **polygon** [819, 960, 2016]. **polygonal** [615, 781, 941, 1524, 2242]. **polygons** [657, 901, 1001, 2177]. **polyharmonic** [264, 266]. **polyhedral** [131, 364, 1206, 1885]. **polymer** [262]. **polymers** [249]. **Polynomial** [449, 1310, 1497, 73, 265, 381, 495, 517, 600, 665, 756, 844, 885, 1067, 1327, 1350, 1393, 1450, 1631, 1652, 1765, 1786, 1791, 1812, 1842, 1960, 2075, 2174, 2181, 748]. **Polynomials** [1244, 73, 285, 457, 458, 507, 980, 1123, 1280, 1309, 1656, 1657, 1814, 1821, 1834, 1951, 2075, 2102, 2113]. **Polytopal** [1096, 1578, 1690]. **polytopes** [411]. **population** [79, 929]. **poroelasticity**

[963, 1421, 2242]. **porous** [25, 305, 426, 425, 520, 521, 759, 1050, 1052, 1382, 1506, 1890]. **Port** [1468]. **Port-Hamiltonian** [1468]. **posed** [379, 662, 1933]. **posedness** [26, 1755]. **positioning** [1636]. **Positive** [1151, 267, 467, 1008, 1088, 1621, 1655, 1827, 1871, 1872, 1904, 1982, 2116, 2167]. **positive-definite** [1982]. **positive-definiteness** [267]. **positive-semidefinite** [1904]. **positive-semidefinite** [1904]. **positive-type** [1621]. **Positivity** [1284]. **Positivity-preserving** [1284]. **Post** [32, 292, 511, 857, 993]. **Post-processing** [32, 292, 511, 857, 993]. **posteriori** [91, 115, 129, 136, 140, 211, 250, 276, 290, 309, 305, 312, 314, 351, 353, 409, 428, 503, 531, 544, 594, 623, 685, 760, 803, 822, 874, 877, 909, 1039, 1061, 1062, 1059, 1073, 1275, 1277, 1407, 1405, 1406, 1421, 1430, 1442, 1471, 1611, 1697, 1737, 1771, 1792, 1798, 1822, 1823, 1898, 2057, 2078, 2121, 2132, 2138, 2250, 742, 120, 462, 475, 772, 1064, 1545, 1566, 738, 126, 483, 858, 1626, 1902, 1470]. **postprocessing** [131]. **Potential** [2065, 168, 1274, 1320, 1402, 1574, 1777]. **potentials** [182]. **Powell** [732, 788, 2025]. **power** [193, 542, 1759]. **power-like** [542]. **powers** [9, 369, 370, 834, 833]. **practical** [236]. **Pre** [2188]. **Pre-asymptotic** [2188]. **Precise** [624]. **precision** [72, 689, 1702, 1910]. **Preconditioned** [187, 2119, 183, 378, 822, 1171, 1840, 2000]. **preconditioner** [496, 598, 999, 1619, 1807, 1904]. **Preconditioners** [1838, 517, 561, 562, 621, 875, 1006, 1081, 1097, 1827, 2014, 2017, 2088, 2147, 739]. **Preconditioning** [1288, 1773, 147, 166, 295, 318, 379, 406, 439, 1723, 1858, 1859, 1957]. **preconvex** [2240]. **Predictor** [2106, 2108, 1112, 2110, 2109]. **Predictor-corrector** [2106, 2108, 2110, 2109]. **prescribed** [473, 611, 750]. **presence** [227]. **Preservation** [282, 997]. **Preserving** [571, 1002, 151, 221, 327, 412, 727, 764, 867, 868, 881, 946, 945, 1001, 1037, 1072, 1152, 1284, 1393, 1392, 1572, 1569, 1724, 1825, 1876, 1973, 2134, 2224, 2232]. **Pressure** [1036, 272, 127, 427, 489, 496, 1001, 1034, 1031, 1232, 1257, 1457, 1561, 1642, 1736, 1888, 712]. **pressure-correction** [1232]. **pressure-dependent** [1257]. **pressure-robust** [127, 1001, 1457, 1561, 1888]. **pressure-stress** [1031]. **pressures** [35, 426]. **prestrained** [367]. **pricing** [1300, 1851, 2149]. **primal** [69, 349, 2087]. **primal-dual** [349]. **primitive** [149]. **primitive-variable** [149]. **principal** [1853, 2153]. **principle** [971, 1371]. **principles** [940, 1408]. **priori** [118, 250, 424, 531, 544, 725, 760, 877, 967, 1374, 1418, 1454, 1684, 1737, 1816, 2032, 2130, 2156, 475, 649, 2138]. **Prize** [96]. **probabilistic** [1132, 1714, 1715]. **problem** [10, 16, 23, 32, 33, 58, 85, 92, 115, 114, 128, 134, 133, 138, 137, 168, 179, 185, 197, 217, 220, 242, 254, 260, 277, 299, 303, 308, 306, 310, 353, 355, 354, 397, 398, 407, 428, 424, 429, 430, 433, 432, 453, 478, 493, 495, 504, 533, 527, 544, 553, 575, 590, 591, 615, 634, 723, 725, 734, 781, 792, 802, 806, 818, 824, 826, 858, 891, 893, 887, 899, 903, 914, 926, 931, 942, 950, 952, 960, 967, 973, 994, 1001, 1015, 1031, 1049, 1060, 1069, 1082, 1084, 1087, 1170, 1171, 1202, 1219, 1246, 1259]. **problem** [1351, 1356, 1369, 1378, 1382, 1385, 1425, 1442, 1443, 1471, 1498, 1524, 1516, 1547, 1562, 1564, 1568, 1600, 1617, 1614, 1625, 1648, 1660, 1666, 1678, 1690, 1708, 1714, 1715, 1728, 1763, 1764, 1772, 1807, 1809, 1815, 1816, 1832, 1839, 1848, 1866, 1870, 1873, 1881, 1933, 1947, 2039, 2041, 2045, 2051, 2054, 2052, 2073, 2084, 2097, 2103, 2124, 2126, 2132, 2148, 2135, 2136, 2137, 2138, 2183, 2198, 2204, 2243, 738, 2129]. **problems**

[2, 4, 7, 15, 59, 60, 62, 63, 64, 66, 67, 90, 91, 116, 118, 131, 130, 140, 142, 143, 144, 172, 188, 187, 186, 194, 204, 209, 246, 252, 288, 289, 291, 301, 317, 319, 332, 335, 336, 338, 337, 339, 344, 357, 374, 375, 379, 384, 385, 395, 400, 404, 444, 479, 481, 480, 490, 510, 513, 514, 512, 521, 529, 532, 538, 549, 551, 554, 560, 576, 578, 579, 582, 611, 595, 609, 592, 593, 600, 618, 623, 629, 631, 640, 642, 641, 644, 662, 664, 669, 679, 685, 686, 693, 741, 752, 755].

problems
[758, 772, 775, 805, 808, 847, 850, 864, 869, 875, 878, 909, 921, 930, 933, 932, 956, 974, 999, 1000, 1007, 1011, 1012, 1028, 1032, 1038, 1039, 1040, 1044, 1048, 1055, 1058, 1063, 1061, 1059, 1064, 1070, 1073, 1075, 1076, 1081, 1086, 1090, 1100, 1098, 1128, 1134, 1146, 1164, 1169, 1174, 1183, 1195, 1214, 1215, 1216, 1224, 1228, 1234, 1262, 1270, 1271, 1273, 1276, 1286, 1298, 1303, 1316, 1320, 1343, 1364, 1390, 1389, 1401, 1402, 1404, 1408, 1414, 1428, 1429, 1448, 1445, 1446, 1447, 1453, 1454, 1456, 1463, 1464, 1482, 1485, 1494, 1501, 1520, 1554, 1565, 1577].

problems
[1576, 1601, 1616, 1618, 1637, 1639, 1643, 1676, 1683, 1681, 1682, 1686, 1689, 1692, 1701, 1707, 1719, 1724, 1725, 1726, 1748, 1782, 1797, 1802, 1801, 1857, 1858, 1870, 1874, 1875, 1878, 1883, 1904, 1906, 1914, 1921, 1922, 1943, 1945, 1953, 1968, 1978, 1983, 1991, 2002, 2010, 2017, 2032, 2050, 2049, 2054, 2055, 2057, 2058, 2081, 2095, 2100, 2119, 2122, 2123, 2125, 2128, 2130, 2158, 2144, 2147, 2177, 2182, 2215, 2216, 2217, 2218, 2219, 2247, 710, 273, 739, 742, 2114, 2107, 2108, 1101].

procedure [820, 1863, 2215]. **procedures** [1968]. **Procesi** [650]. **process** [53, 684, 881, 1418, 1867]. **processes** [79, 132, 435, 652, 1306, 1440, 1441, 1940, 2064, 778]. **processing** [32, 292, 511, 857, 993, 1988]. **Product** [19, 629, 2089, 506, 582, 620, 916, 947, 1121, 1416, 1847, 1909, 2046, 2063, 2232].

product-convolution [916]. **products** [1993, 2021]. **profile** [1104, 1191].

programming [84, 988, 1094, 1111, 1151, 1217, 1429, 1738, 2183]. **Programs** [1227].

progress [1826]. **Projected** [1969, 81, 343, 732, 2183]. **Projection** [30, 2006, 2171, 20, 55, 75, 135, 297, 564, 723, 724, 1042, 1504, 1666, 1694, 1744, 2040, 740].

Projection-free [2171]. **projections** [1090, 2139]. **projective** [1739]. **projector** [908]. **projectors** [1635]. **Prokhorov** [569].

prolate [260]. **proliferation** [1178].

Prolongation [1507].

Prolongation-collocation [1507]. **proof** [1995]. **proofs** [1160, 1159]. **propagation** [291, 576, 1057, 1215, 1628, 1725, 1726].

proper [1163]. **Properties** [618, 1765, 1956, 2252, 2253, 17, 28, 278, 457, 484, 487, 552, 601, 655, 698, 719, 736, 939, 985, 1002, 1067, 1103, 1643, 1651, 1694, 1851, 1962, 2026, 2058, 2079, 2181, 2202, 2203, 2214, 2251, 711]. **property** [47, 170, 697].

proportional [282, 452]. **protein** [80].

provable [1088]. **proximal** [1216, 1727].

Prüfer [339]. **pseudo** [936, 1444].

pseudo-inverses [1444]. **pseudo-spectral** [936]. **pseudorank** [172]. **Pseudospectra** [2185, 476]. **Pseudospectral** [1632, 986, 1013, 1299, 1586, 1610, 1844, 1681, 1682, 1693]. **pseudostress** [493, 544, 1678]. **pseudostress-based** [544].

Pták's [1553]. **punch** [234]. **Pure** [78, 292].

Pyramid [1664]. **pyramids** [1774].

Pythagorean [945, 947].

Pythagorean-hodograph [945, 947].

Q [2046]. **QP** [977]. **QR** [1095]. **quad** [591, 781]. **quad-curl** [591]. **quad-rot** [781].

quadrant [653]. **Quadratic** [173, 471, 2040, 2218, 392, 428, 680, 765, 766, 764, 968, 1094, 1111, 1135, 1151, 1166, 1248, 1301, 1420, 1429, 1738, 1794, 1873, 1928, 2013, 2100, 2217]. **quadratically** [1151].

Quadrature [507, 901, 1944, 141, 153, 190, 207, 296, 337,

473, 568, 789, 1181, 1332, 1333, 1435, 1493, 1583, 1659, 1675, 1711, 1764, 1772, 1795, 1830, 1865, 1891, 1986, 2029, 2053, 2083, 2091, 2093, 2112, 2180, 743, 2028].

Quadratures [1712, 1595, 1713].

quadrilateral [55, 596, 2217, 2218, 2219, 2238].

Qualitative [1103, 17, 939]. **qualocation** [818, 1817]. **quantification** [1122, 1361]. **quantiles** [1800]. **Quantitative** [1534]. **quantization** [1811]. **quantum** [146]. **quarkonial** [715]. **Quartic** [1211, 837].

Quasi [379, 935, 1416, 1457, 1684, 1717, 2240, 112, 248, 314, 324, 347, 346, 455, 456, 465, 523, 596, 664, 718, 911, 996, 1028, 1075, 1076, 1093, 1157, 1231, 1277, 1716, 1798, 1865, 2023, 2132, 1444, 2183, 2239]. **quasi-**[112]. **quasi-continuum** [1798]. **quasi-definite** [1865]. **quasi-geometric** [1157]. **quasi-interpolation** [465, 996, 2023]. **quasi-linear** [1277, 1716]. **quasi-Magnus** [347, 346]. **Quasi-Monte** [1416, 1075, 1076, 1093]. **Quasi-Newton** [379, 2240, 1444, 2183, 2239]. **quasi-Newtonian** [314, 664].

Quasi-optimal [1457, 1684, 455, 456, 718, 911].

quasi-optimality [1028]. **Quasi-reliable** [935]. **quasi-second-order** [1231]. **quasi-square** [523]. **quasi-static** [2132]. **Quasi-symplectic** [1717]. **quasi-uniform** [324]. **quasi-variational** [248].

quasi-Wilson [596]. **quasicontinuum** [798]. **quasiconvex** [1]. **quasilinear** [335, 512, 664, 1205, 1258, 1276, 1622, 1816, 2130]. **quasimatrix** [2092]. **quasinonlocal** [1540]. **Quasioptimal** [540]. **quasistatic** [1532].

queueing [956]. **quintic** [268, 946, 945, 1822].

R [477, 721]. **R-algorithm** [477]. **R-linear** [721]. **Rachford** [584]. **radar** [386]. **radial** [264, 470, 467, 614, 985, 986, 1014, 1340, 1488, 1499, 1605, 1846, 1963, 1998, 2196].

radiation [260, 291, 1971]. **radiative** [708, 992, 1121]. **radii** [1161]. **radiosity** [161, 1206]. **radius** [1218, 1399, 1693, 1398].

Radon [13]. **Random** [871, 1458, 1829, 53, 176, 284, 1075, 1076, 1243, 1361, 1519, 1697, 2060, 2221].

Randomized [783, 1263, 1761, 2179, 1058, 2117]. **Range** [358, 1503, 1243, 1394, 1540, 1862, 1993]. **range-dependent** [1243]. **Range-relaxed** [358, 1503]. **ranges** [356]. **rank** [72, 175, 284, 419, 633, 803, 810, 1249, 1576, 1803, 2100, 2116, 2166, 2253].

rank-deficient [284]. **rank-one** [1803]. **rank-revealing** [810]. **rapid** [21, 1307, 1308, 1335, 1336, 1639, 1985].

Rate [1024, 1952, 68, 87, 178, 323, 586, 1150, 1179, 1257, 1267, 1439, 1475, 1570, 1769, 1922]. **rate-independent** [87]. **rates** [22, 263, 350, 393, 394, 417, 438, 474, 851, 1043, 1132, 1358, 1459, 1535, 1764, 1874, 1875, 1924, 1974, 2081, 2151, 2139, 2170, 2175].

Rational [473, 1115, 1302, 1374, 1994, 380, 468, 469, 658, 659, 754, 753, 765, 766, 764, 774, 1069, 1133, 1135, 1174, 1326, 1349, 1423, 1554, 1680, 1830, 2112, 2164]. **rationals** [61].

Raviart [197, 805, 1456, 1561]. **Rayleigh** [1963]. **RBF** [469, 468]. **reaction** [23, 132, 208, 446, 553, 642, 685, 1002, 1139, 1433, 1442, 1443, 1471, 1527, 1565, 1568, 1582, 1614, 1618, 1685, 1941, 1962, 2192, 273, 2049]. **reaction-diffusion** [23, 132, 208, 642, 1582, 1618, 1685, 1941, 1962, 2192].

Reaction-diffusion-type [2049]. **reaction-subdiffusion** [1527]. **real** [295, 564, 737, 1161, 1647, 1653, 1658, 1659, 2091, 2105]. **real-valued** [295]. **Realistic** [760, 2160]. **really** [1001]. **reconstruction** [686, 1064, 1279, 1394, 1511].

reconstructions [1001, 1898]. **Recovery** [1372, 225, 224, 685, 1027, 1482, 1481, 1512, 1736, 1911, 2020, 2189, 2241, 224].

Rectangular

[821, 523, 990, 1577, 2046, 2185, 2210].
rectangularly [1837]. **rectilinear** [734].
Recurrence [754, 1280, 2004]. **Recursive**
 [1623, 1131, 1694, 1811].
recursive-trust-region [1131].
redistancing [917]. **Reduced**
 [1073, 1921, 34, 459, 568, 1021, 2107].
Reduced-basis [1921]. **reducible** [2180].
reduction
 [63, 64, 1196, 1226, 1290, 1606, 1764].
Redundancy [2022]. **redundant** [672].
Reeves [47, 719, 882]. **Referees**
 [98, 100, 102, 105, 107, 109]. **reference** [974].
Refinable [463]. **refined**
 [36, 55, 941, 943, 1137, 1180]. **refinement**
 [1245, 1677]. **reflection** [1087].
reformulation [182]. **Regge** [625]. **regime**
 [775, 1041, 2047]. **region** [80, 189, 1112,
 1131, 1132, 1143, 1862, 2082, 2227]. **regions**
 [192, 885, 1158, 1419, 1620, 1837, 2106].
regression [665, 681, 1800, 2169].
regressions [1762]. **regular**
 [89, 265, 430, 499, 1115]. **Regularity**
 [790, 112, 179, 181, 211, 441, 518, 1075, 1447,
 1515, 1523, 1588, 2194, 2248, 713].
regularization
 [279, 536, 890, 1129, 1424, 2186].
regularizations [1183]. **Regularized**
 [186, 252, 278, 350, 384, 703, 923, 1163].
Regularizing [1214]. **regularly** [369, 370].
reiterated [1852]. **related**
 [19, 573, 1418, 1422, 1716, 1916, 2038].
relation [410]. **relations** [1110].
relationship [79]. **relative**
 [853, 1073, 1513]. **relaxation**
 [185, 1785, 2192]. **relaxed** [358, 1503].
reliability [651, 1025, 1415]. **reliable** [935].
ReLU [1555]. **Remarks** [1893]. **remeshing**
 [1879]. **removal** [1191]. **removing** [2153].
renormalization [1631]. **reordering**
 [1142, 1243]. **Repeated** [796, 1214].
Representation [1085, 633, 775, 1201].
representations [176]. **reproducing** [1915].
reproduction [2174]. **REQP** [259].
requirements [1573]. **reservoir** [496, 548].
Residual [276, 353, 623, 1545, 2132, 613,
 990, 1273, 1396, 1776, 1823].
Residual-based [353, 623, 1545, 1823].
Residual-type [2132]. **residuals** [134].
residue [2109]. **resistivity** [1437].
resolution [164]. **resolved** [425]. **resolvent**
 [2104]. **restart** [968]. **restarted** [1315, 1680].
restricted [640, 1444, 1983]. **Restrictively**
 [183]. **result** [1008, 1029, 2190]. **results**
 [12, 222, 528, 533, 564, 1076, 1354, 1834,
 1866, 1940, 2104]. **Retarded** [1948, 1452].
retrieval [730]. **revealing** [810].
revelations [2099]. **reverse** [628].
reversible [516]. **revisited** [634]. **Rivière**
 [2235]. **Riccati** [1167, 1375, 1374, 1531,
 1557, 1874, 1875, 1997]. **Riccati-based**
 [1874, 1875]. **Riccati-type** [1375]. **Ricci**
 [1003]. **Richards** [663]. **Richardson** [1092].
Riemann [630, 1701, 1835, 2084, 2093].
Riemann-problem-based [2084].
Riemannian
 [24, 189, 247, 757, 773, 866, 972, 1143, 1211,
 1221, 1311, 1521, 1727, 2116, 2171]. **right**
 [48, 2051, 2077]. **right-hand** [48, 2051].
right-hand-side [2077]. **rightmost** [1683].
rigid [234, 931, 1868]. **risk** [274].
risk-averse [274]. **Ritz** [1898, 1963]. **RK**
 [1919]. **RK4** [124]. **RLW** [1165]. **Robbins**
 [1839]. **Robin** [241, 1373]. **Robust**
 [476, 480, 594, 758, 949, 1035, 1421, 1552,
 1685, 1947, 2014, 2078, 778, 19, 127, 208, 553,
 917, 1001, 1036, 1391, 1457, 1497, 1561, 1686,
 1721, 1888, 1890, 1906, 2126, 2250, 712, 272].
rod [1235]. **role** [406]. **Ronald** [1141]. **root**
 [733, 1495, 748]. **root-finding** [1495, 748].
roots [416, 1627]. **Rosenbrock** [1400]. **Ross**
 [53, 684]. **rot** [781]. **rot-rot** [781]. **rotating**
 [931, 1223]. **rotation** [800, 801, 1593].
Rothe [1390]. **Rothe-Galerkin** [1390].
rough [445, 588, 2170]. **round** [689].
round-to-nearest [689]. **rounding**
 [689, 2225]. **RPC** [807]. **RPC-SAV** [807].
rule [1342, 1622]. **rules**

[19, 296, 414, 804, 1517, 1607, 1644, 1659, 1711, 2053, 2083, 2133, 2180, 2113]. **Runge** [2031, 192, 206, 281, 472, 486, 500, 501, 505, 541, 671, 667, 668, 669, 670, 812, 816, 813, 814, 815, 820, 862, 1140, 1193, 1242, 1283, 1295, 1325, 1466, 1571, 1651, 1779, 1806, 1892, 1940, 1955, 1969, 1984, 1999, 2030, 2125, 2173, 2233, 1318, 2111, 2105].

Sabin [732, 788, 2025]. **saddle** [188, 186, 405, 1039, 1048, 1052, 1827, 1904, 2017, 2103, 2147, 2216, 745]. **saddle-point** [188, 186, 405, 1827, 2103]. **safeguarded** [1776]. **Sakaguchi** [8]. **sample** [608, 665, 935]. **sampled** [1599]. **samples** [22]. **Sampling** [1909, 22, 93, 152, 213, 274, 2064, 2205].

Sandpiles [248]. **saturated** [305]. **saturation** [1330]. **SAV** [807, 1696]. **scalar** [399, 1188, 1276, 1697, 1856, 1967, 1987, 2231]. **scale** [180, 584, 904, 1111, 1529, 1535, 1568, 1681, 1682, 1775, 1997]. **scaleable** [1721]. **scaled** [402]. **scales** [4, 208, 1685]. **Scaling** [1488, 951, 1925, 2168]. **scattered** [732, 2196]. **scattering** [207, 331, 384, 567, 864, 931, 1021, 1071, 1240, 1361, 1426, 1427, 1496, 1537, 1623].

Scharfetter [1954]. **scheme** [3, 27, 87, 90, 141, 174, 216, 222, 251, 253, 258, 297, 330, 418, 520, 557, 555, 572, 582, 610, 603, 586, 622, 638, 642, 641, 651, 671, 690, 728, 790, 820, 827, 828, 829, 867, 868, 876, 906, 921, 923, 1020, 1072, 1083, 1109, 1162, 1170, 1215, 1220, 1232, 1231, 1266, 1272, 1367, 1383, 1386, 1389, 1405, 1413, 1430, 1438, 1439, 1476, 1483, 1486, 1514, 1536, 1533, 1560, 1564, 1572, 1588, 1612, 1616, 1621, 1634, 1695, 1696, 1752, 1756, 1762, 1764, 1833, 1868, 1890, 1889, 1895, 1903, 1919, 1946, 1954, 1962, 1971, 2011, 2146, 2197].

scheme [2198, 2224]. **Schemes** [824, 13, 14, 25, 41, 65, 95, 132, 149, 195, 213, 292, 326, 329, 360, 364, 397, 398, 401, 459, 508, 548, 554, 556, 558, 570, 587, 618, 650, 677, 799, 807, 809, 827, 845, 919, 922, 950, 970, 969, 973, 1000, 1056, 1114, 1188, 1193, 1196, 1228, 1267, 1279, 1284, 1312, 1352, 1384, 1412, 1437, 1544, 1587, 1637, 1679, 1700, 1722, 1733, 1735, 1887, 1901, 1917, 1942, 1967, 1982, 1987, 2055, 2076, 2084, 2085, 2134, 2143, 2152, 2170, 2202, 2203, 2222, 2231].

Schmidt [1080]. **Scholes** [549, 1391, 2149, 1319]. **Schrödinger** [6, 46, 111, 182, 181, 327, 346, 441, 511, 518, 589, 775, 853, 857, 1054, 1152, 1263, 1342, 1479, 1498, 1572, 1569, 1605, 1608, 1609, 1698, 1856, 1942, 1963, 1998, 1999, 2090].

Schur [1081, 1127, 2017]. **Schwarz** [639, 150, 177, 374, 401, 793, 794, 875, 1239, 1404, 1550, 1957, 2070, 2192, 2209, 2226].

Schwarz-Neumann [177]. **screens** [325, 1240, 1360]. **SDEs** [605, 907, 1483, 1749, 1764, 1902, 2152, 817].

search [47, 612, 613, 705, 1113, 1311, 2206]. **search-extension** [2206]. **Second** [1278, 67, 82, 83, 94, 149, 160, 163, 281, 335, 338, 515, 522, 518, 590, 692, 780, 784, 786, 805, 905, 1035, 1038, 1086, 1106, 1109, 1112, 1120, 1194, 1231, 1277, 1294, 1314, 1316, 1343, 1376, 1383, 1404, 1513, 1536, 1542, 1566, 1574, 1616, 1658, 1754, 1752, 1830, 2009, 2010, 2190, 2191, 2194, 2207, 2241, 2072, 2111, 2108].

second-derivative [1112]. **second-kind** [1658, 2072, 2111]. **Second-order** [1278, 67, 82, 83, 94, 149, 335, 338, 515, 522, 518, 590, 692, 780, 784, 786, 805, 905, 1035, 1038, 1086, 1109, 1194, 1277, 1314, 1343, 1383, 1404, 1513, 1536, 1542, 1566, 1574, 1616, 1754, 1752, 2010, 2190, 2191, 2194, 2207, 2108].

second-order-accurate [1316]. **section** [386]. **sectorial** [761, 1251]. **SEEs** [790].

Segel [330, 1284, 1930]. **segment** [198].

Segrè [2117]. **Seidel** [1260]. **selection** [2, 756, 1193, 1802, 2182]. **self** [141, 258, 391, 704, 847, 1513, 1647, 2040, 2138].

self-adaptive [141, 847]. **self-adjoint** [391, 1513, 2040]. **self-avoiding** [258].

self-correcting [704]. **Semi** [459, 6, 60, 315, 633, 638, 1200, 1220, 1268, 1364, 1514, 297].

Semi-discrete [459, 1364, 1514]. **semi-discretizations** [6]. **semi-implicit** [315, 638, 1200, 1220, 1268]. **semi-infinite** [633]. **semi-Lagrangian** [297]. **semi-linear** [60]. **semiaxis** [737, 1658, 1659]. **semibounded** [1892]. **semiclassical** [111, 775, 1479, 1698]. **semidefinite** [627, 988, 1151, 1576, 1904, 2116]. **semidefinite-box-constrained** [1576]. **Semidiscrete** [1819, 220, 417, 1098, 1366, 1978]. **semidiscretization** [663, 1031]. **semidiscretized** [1329]. **semiexplicit** [65]. **semigroup** [53, 1449]. **Semilinear** [1808, 5, 45, 74, 532, 553, 572, 691, 818, 965, 1397, 1442, 1443, 1739, 1754, 1882, 2206, 2236]. **Semirobust** [1200]. **semiseparable** [1655]. **semismooth** [20]. **sensitivity** [1847]. **separable** [1128, 1217, 1216, 1761]. **separation** [228, 229, 230, 352]. **sequence** [1799]. **sequences** [491, 783, 1092]. **Sequential** [1950, 82, 83, 1227, 1738]. **series** [21, 93, 492, 884, 1085, 1187, 1653, 1654, 1759, 1760, 1837, 2012, 2094, 717]. **Set** [1250, 349, 859, 917, 923, 1080, 1431, 1511, 2116]. **set-valued** [859, 1431, 1511]. **sets** [343, 537, 665, 672, 1780, 1969]. **setting** [550]. **Several** [2058, 195, 508, 1587, 2083]. **severe** [961]. **shallow** [123, 124, 300, 1231, 1396]. **Sham** [857]. **Shanks** [436]. **Shanno** [1863]. **Shape** [412, 764, 946, 945, 1392, 1876, 151, 727, 866, 1099, 2224]. **Shape-preserving** [412, 946, 945, 1392, 151, 727]. **shaped** [1600]. **Sharp** [535, 676, 600, 1550]. **Shaw** [893]. **shear** [1257]. **shear-rate-** [1257]. **sheet** [254]. **shell** [309, 1613]. **Shepard** [767]. **shifted** [163]. **shifts** [1104, 1291, 1661]. **Shishkin** [1170, 1562, 1577, 1601, 1917]. **shock** [1087]. **shock-reflection** [1087]. **shooting** [1271, 1878]. **Shor** [477]. **Short** [1159]. **shortening** [751, 892]. **shot** [2039]. **shrinking** [750]. **side** [2077]. **sided** [314]. **sides** [48, 2051]. **Siewert** [76]. **signal** [774]. **significance** [961]. **significant** [2098]. **Signorini** [539, 1011, 1857, 2132, 2135]. **Signorni** [2032]. **Signorni-type** [2032]. **Sigurdsson** [1938]. **similarity** [1087, 1919]. **Simple** [997, 34, 251, 253, 258, 847, 908, 1113, 2004]. **simplex** [20, 608, 705, 1212]. **simplicial** [411]. **simplified** [707, 1930]. **simulating** [257, 1164, 2245]. **Simulation** [254, 817, 195, 496, 605, 632]. **simulations** [283, 1868]. **Simultaneous** [2056, 1627, 1949, 2062]. **Sinc** [336, 1605, 2064, 1604, 1766]. **Sinc-collocation** [336, 1605]. **sinc-Galerkin** [1604, 1766]. **sinc-Gauss** [2064]. **Single** [304, 725, 818, 1041, 1547, 1551, 1815, 1816]. **single-curl** [1551]. **Single-grid** [304]. **single-layer** [1041]. **single-phase** [725, 1547, 1815, 1816]. **singly** [484]. **singly-implicit** [484]. **Singular** [1137, 7, 58, 200, 324, 348, 395, 449, 565, 579, 600, 688, 696, 728, 791, 822, 835, 878, 954, 1012, 1136, 1228, 1294, 1353, 1472, 1473, 1493, 1528, 1549, 1637, 1644, 1665, 1754, 2029, 2028, 2033, 2067, 2072]. **singular-degenerate** [200]. **singularities** [210, 1224, 1226, 1287, 1477, 1601, 1853]. **singularity** [1925]. **singularly** [74, 92, 479, 553, 582, 850, 950, 1442, 1443, 1463, 1471, 1485, 1565, 1568, 1600, 1618, 1685, 1708, 1707, 2050, 2049, 2055, 2126, 2130]. **SIP** [1633, 739]. **SIP-DG** [739]. **Sivashinsky** [41, 1586]. **sixth** [826, 1154, 1343]. **sixth-order** [826, 1154, 1343]. **size** [2, 13, 261, 756, 935]. **sketch** [1761]. **skew** [188, 1185, 1334]. **skew-Hermitian** [188]. **skew-symmetric** [1185, 1334]. **slab** [1122]. **slice** [1706]. **slice-based** [1706]. **slip** [934]. **Sloan** [1119]. **Slobodeckij** [928]. **slow** [1958]. **slowly** [1760]. **SLQ** [1874, 1875]. **Smale** [599, 1521]. **small** [380, 644, 910, 1831, 1920]. **Smaller**

[1396]. **smallest** [2166]. **Smolyak** [783]. **smooth** [70, 71, 162, 239, 792, 1317, 1360, 1381, 1567, 1806, 1810, 2059, 2249]. **Smoothed** [617]. **Smoothing** [2214, 595, 695, 770, 1260, 2109]. **Smoothness** [1144, 2202, 414, 795, 1093, 1573, 1724, 1733, 2022]. **snapshot** [2001]. **Sneyd** [2197]. **Sobolev** [147, 252, 464, 714, 731, 1093, 1156, 1458, 1499]. **Sobolev-type** [1499]. **softmax** [345]. **software** [698]. **solar** [3]. **solenoidal** [1807]. **solid** [133, 967, 1282, 2245]. **solid-state** [2245]. **solidification** [245, 1418]. **Solution** [505, 523, 1244, 1389, 1531, 91, 92, 148, 157, 162, 161, 301, 362, 385, 407, 406, 447, 448, 481, 499, 565, 564, 567, 597, 595, 678, 679, 689, 696, 707, 717, 735, 791, 810, 819, 886, 912, 931, 974, 989, 1069, 1087, 1134, 1171, 1197, 1199, 1207, 1262, 1316, 1320, 1385, 1390, 1402, 1403, 1450, 1474, 1494, 1498, 1563, 1575, 1584, 1582, 1629, 1630, 1675, 1714, 1715, 1725, 1726, 1787, 1839, 1843, 1888, 1894, 1900, 1922, 1942, 1948, 1953, 1963, 1961, 1997, 1996, 1998, 1999, 2020, 2029, 2028, 2039, 2073, 2096, 2124, 2154, 2165, 2251, 2072]. **solution** [2114]. **solution-dependent** [447]. **solutions** [89, 159, 164, 180, 216, 306, 412, 454, 495, 494, 563, 650, 668, 768, 803, 835, 853, 919, 1077, 1089, 1098, 1140, 1153, 1229, 1230, 1254, 1286, 1303, 1328, 1364, 1375, 1402, 1543, 1672, 1732, 1750, 1769, 1824, 1837, 1857, 1864, 1919, 1935, 1962, 2043, 2128, 2206, 2248, 2252]. **Solvability** [313, 1022]. **solve** [609, 756, 1341, 1722]. **solver** [630, 1024, 1316, 2212]. **solvers** [842, 987, 1264, 2127]. **Solving** [300, 631, 844, 899, 1249, 1423, 1748, 1884, 1981, 1989, 2, 48, 141, 237, 401, 584, 620, 638, 734, 956, 992, 1070, 1108, 1165, 1215, 1271, 1350, 1360, 1391, 1429, 1510, 1557, 1631, 1660, 1707, 1723, 2135, 2134]. **Some** [116, 191, 222, 564, 1658, 1694, 1949, 1998, 2055, 34, 329, 457, 697, 809, 883, 1000, 1340, 1349, 1466, 1637, 1657, 2191]. **SOR** [1509, 1526]. **SOR-like** [1526]. **Soulie** [33]. **source** [149, 558, 1262, 1279, 1967, 1987]. **Space** [30, 125, 144, 210, 316, 421, 13, 14, 74, 86, 126, 151, 252, 305, 315, 321, 440, 488, 545, 607, 605, 673, 725, 773, 777, 875, 889, 920, 933, 932, 971, 1026, 1044, 1090, 1109, 1255, 1258, 1372, 1454, 1587, 1626, 1688, 1692, 1725, 1726, 1816, 1873, 2035, 2082, 2154, 2238, 739]. **Space-Time** [30, 210, 316, 421, 74, 126, 1026, 1454, 1626, 1688, 1873]. **space-time-dependent** [1372]. **spaced** [1822]. **spaces** [55, 143, 374, 379, 464, 463, 714, 731, 866, 1015, 1051, 1093, 1156, 1169, 1191, 1237, 1264, 1499, 1739, 1813, 1840, 1915, 2065, 2066, 2080, 2179, 711]. **spaces-based** [1051]. **spanning** [1913]. **Sparse** [1181, 2063, 57, 86, 175, 523, 572, 582, 598, 584, 617, 838, 843, 842, 841, 1136, 1137, 1361, 1452, 1519, 1568, 1631, 1683, 1863, 1901, 1937, 2081, 2080, 2179, 2187]. **Sparsified** [260]. **Spatial** [1670, 263, 292, 361, 362, 945, 1751]. **spatially** [981]. **SPD** [836]. **SPDE** [1449]. **SPDEs** [418, 1589, 1874, 1875, 2151, 2146]. **special** [915, 1008, 1992, 2105]. **specified** [682, 1453]. **Spectra** [1918, 1513]. **Spectral** [8, 81, 311, 331, 442, 729, 1243, 1294, 1360, 1496, 1513, 7, 111, 142, 169, 168, 194, 304, 307, 343, 390, 439, 453, 517, 613, 672, 736, 821, 882, 906, 936, 987, 1012, 1165, 1175, 1189, 1403, 1426, 1479, 1480, 1613, 1647, 1698, 1737, 1838, 1859, 1884, 2016, 2042, 2059, 2159, 2226]. **spectral-in-time** [1175]. **spectral/** [517]. **spectral/difference** [1480]. **spectrum** [1640, 1647, 2040]. **speed** [477]. **sphere** [176, 267, 467, 906, 978, 1306, 1478, 1519, 1619, 1635, 1948]. **spherical** [129, 906, 1480, 1613]. **spheroidal** [260]. **spine** [24]. **spiral** [666]. **Spline** [537, 1201, 1961, 338, 449, 679, 681, 727, 765, 787, 918, 945, 979, 1091, 1105, 1264, 1379, 1391, 1649, 1747, 1748, 1820, 1876, 2010,

2013, 2055, 2094]. **spline-fitting** [679].
splines [264, 266, 268, 432, 445, 463, 471, 621, 666, 732, 788, 837, 946, 1211, 1221, 1290, 1393, 1420, 1580, 1606, 1638, 1765, 1778, 1822, 1869, 1928, 2020, 2023, 2022, 2025].
split [571, 779, 1053]. **split-step** [1053].
split-steps [779]. **Splitting** [95, 969, 64, 66, 67, 188, 215, 344, 389, 417, 460, 584, 620, 691, 744, 775, 845, 876, 938, 970, 1162, 1205, 1217, 1216, 1226, 1268, 1395, 1413, 1410, 1434, 1479, 1572, 1887, 1904, 1989, 1990, 2147, 2232]. **splittings** [1204, 746]. **splittings-convergence** [1204].
spreading [227]. **Spurious** [863, 1286, 1303, 1140, 1328, 1750, 1962, 2043].
SQP [612, 1079, 1112]. **square** [523, 543, 589, 795]. **Squared** [801]. **squares** [172, 278, 319, 410, 560, 640, 678, 681, 682, 699, 770, 771, 976, 1481, 1530, 1580, 1636, 1660, 1704, 1709, 1718, 1802, 1801, 1953, 1965, 2036, 2051, 2174]. **squaring** [406, 951].
Stability [40, 86, 132, 148, 165, 194, 196, 281, 348, 499, 599, 669, 784, 804, 832, 1905, 990, 1157, 1194, 1283, 1296, 1329, 1323, 1339, 1582, 1585, 1643, 1651, 1962, 2005, 2035, 2068, 2086, 2143, 2175, 2212, 2233, 1318, 1319, 55, 95, 163, 190, 192, 223, 376, 396, 397, 398, 433, 432, 476, 484, 485, 486, 552, 564, 661, 667, 670, 675, 676, 709, 779, 900, 1008, 1029, 1042, 1056, 1078, 1158, 1160, 1159, 1161, 1206, 1223, 1247, 1252, 1279, 1372, 1386, 1419, 1433, 1483, 1497, 1539, 1534, 1575, 1590, 1594, 1595, 1615, 1614, 1759, 1887, 1892, 1924, 2083, 2104].
stability [2127, 2176, 2207, 711, 748, 2111, 2105, 2106, 2110, 2109, 1538]. **Stabilization** [30, 1487, 1536, 219, 318, 615, 723, 921, 1034, 1155, 1522, 1577, 1666, 740]. **stabilized** [5, 14, 134, 186, 220, 481, 836, 994, 1079, 1202, 1219, 1272, 1461, 1552, 1788, 1991, 2004, 2078, 712, 272, 273]. **Stable** [245, 246, 257, 558, 809, 1139, 1593, 35, 286, 580, 581, 644, 668, 908, 1094, 1185, 1197, 1249, 1343, 1352, 1413, 1484, 1514, 1533, 1616, 1660, 1666, 1732, 2004, 2125, 2231, 2245, 740, 745].
stably [286]. **stage** [70, 1679, 1984].
staggered [636, 1110, 1231, 2243, 2242].
Standard [164, 124, 178, 410, 1611].
starlike [1821]. **stars** [1330, 2120]. **starting** [501]. **state** [54, 156, 429, 595, 894, 899, 1544, 2103, 2245].
state/Hopf [2193]. **states** [937]. **static** [133, 2132]. **stationary** [148, 802, 829, 874, 934, 943, 1002, 1373, 1495, 1732, 1833].
statistical [1824, 1847]. **Steady** [2193, 156, 222, 899, 1364, 2103].
Steady-state [2193, 156, 899, 2103].
Steady-state/Hopf [2193]. **steepest** [700, 701, 716, 736, 1041, 1150]. **Stefan** [407, 509, 611, 725, 818, 891, 887, 1270, 1520, 1639, 1815, 1816, 2041, 2103, 2128]. **Stehfest** [1475]. **Steklov** [85, 1028, 1288, 1728, 2138, 2204]. **stencil** [644]. **stencils** [731]. **Step** [1762, 2, 211, 261, 472, 501, 660, 756, 886, 1047, 1053, 1112, 1149, 1184, 1405, 1406, 1495, 1968, 1998].
step-size [756]. **steplength** [1068, 1896].
stepping [18, 87, 124, 521, 587, 820, 1417, 1558, 1583, 1751, 1753, 1895, 1931, 2014].
steps [779, 1035, 1661, 2214]. **stepsize** [491, 1193]. **Stiefel** [1289]. **stiff** [541, 698, 842, 1241, 1273, 1304, 1787, 2114].
Stirling [1734]. **Stochastic** [383, 588, 1589, 5, 119, 125, 126, 199, 200, 274, 293, 323, 326, 362, 371, 373, 399, 417, 422, 461, 522, 569, 574, 589, 586, 587, 656, 689, 776, 825, 899, 966, 965, 1108, 1238, 1267, 1268, 1292, 1314, 1358, 1357, 1397, 1410, 1417, 1451, 1460, 1538, 1539, 1528, 1544, 1560, 1572, 1579, 1588, 1626, 1642, 1697, 1716, 1735, 1767, 1769, 1859, 1873, 1882, 2068, 2081, 2171, 851].
stochastically [79]. **Stokes** [603, 957, 959, 1162, 1272, 1552, 11, 30, 29, 33, 62, 122, 128, 127, 134, 135, 136, 167, 180, 179, 211, 214, 263, 270, 276, 308, 304, 307, 306, 310, 312, 326, 364, 422, 424, 430, 433, 432, 478, 489, 493, 504, 544, 602, 647, 776, 793, 794, 824, 836, 870, 914, 934, 943, 966, 1001, 1006, 1019,

1034, 1035, 1036, 1107, 1176, 1200, 1219, 1253, 1285, 1377, 1386, 1407, 1411, 1456, 1457, 1476, 1497, 1541, 1532, 1561, 1592, 1603, 1634, 1641, 1648, 1678, 1684, 1763, 1770, 1807, 1833, 1885, 1888, 1908, 747, 1933, 1965, 1964, 2015, 2052]. **Stokes** [2124, 2243, 712, 272, 740, 2129]. **Stokes-Biot** [1532]. **Stopping** [1702, 373, 2133, 2114]. **story** [1743]. **straight** [1922]. **straight-edged** [1922]. **straightening** [1860]. **strain** [366]. **strain-limiting** [366]. **strains** [1920]. **Strang** [562]. **Strang-type** [562]. **strategies** [84, 274, 1279, 1417, 1440, 1831, 2173]. **strategy** [2, 70, 1606, 1680]. **Stream** [1908, 307, 1736]. **stream-function** [307]. **streamline** [1170, 2046]. **streamline-diffusion** [2046]. **stress** [526, 1031, 1107]. **stresses** [646]. **stretched** [1552]. **strict** [267, 413]. **Strictly** [467]. **string** [1860]. **strip** [1705]. **strip-based** [1705]. **stroboscopic** [1943]. **Strong** [278, 326, 417, 587, 684, 1358, 1357, 1544, 1560, 1579, 1648, 1873, 2151, 790, 1749, 1811, 1892, 2152]. **strongly** [664, 688, 1117, 1389, 1491, 1584, 1882, 2123]. **structural** [299, 1029, 1030, 1785]. **structurally** [1660]. **Structure** [1037, 1584, 95, 316, 467, 678, 785, 970, 969, 1031, 1281, 1537, 1633, 1794, 1832, 1927, 2161, 2224]. **Structure-preserving** [1037, 2224]. **structured** [13, 810, 2117]. **structures** [1362]. **studies** [287]. **Study** [923, 952]. **Sturm** [288, 339, 395, 926, 1012, 1069, 1134, 1271, 1878]. **Sub** [432, 1599, 1751]. **sub-diffusion** [1751]. **Sub-Grid** [432]. **sub-sampled** [1599]. **subcycling** [845]. **subdiffusion** [1367, 1368, 1369, 1372, 1397, 1401, 1527, 1621]. **subdivision** [769, 1144, 1306, 1664, 1733, 1734, 1916, 2202, 2203]. **subgradient** [2]. **Subgrid** [1155, 180]. **subgrid-scale** [180]. **subject** [735, 2239]. **submanifolds** [773, 1504]. **submatrix** [2166]. **Subsampled** [280, 363]. **subsequent** [1095]. **subsonic** [2047]. **subspace** [953, 1345]. **subspace-breaking** [1345]. **substructuring** [1705, 1706]. **subtraction** [961]. **successive** [881, 1208, 1650]. **Sufficient** [950]. **suitable** [621]. **sum** [279, 345, 771, 876]. **sums** [280, 408, 1419, 2167]. **sup** [223, 320, 432, 1484, 1666, 740]. **super** [605, 649, 827, 1150, 2152, 817]. **super-convergence** [827]. **super-convergent** [649]. **super-linear** [605, 1150, 2152, 817]. **Supercloseness** [1577, 1600]. **superconducting** [897, 2044]. **superconductivity** [437, 888, 894]. **superconductors** [248]. **Superconvergence** [854, 1168, 1469, 1556, 1692, 1899, 282, 411, 451, 1601, 1958, 2026, 2053, 2190]. **Superconvergent** [1512, 2241, 647, 646, 1005, 1885]. **superiorization** [2]. **superlinear** [1864]. **superposition** [80]. **supersmoothness** [2022]. **SUPG** [712, 272]. **SUPG-stabilized** [712, 272]. **supported** [614]. **Supraconvergence** [216]. **supraconvergent** [1032]. **surface** [54, 66, 67, 198, 236, 260, 445, 787, 788, 874, 895, 947, 1091, 1210, 1344, 1379, 1445, 1447, 1907, 1908, 2131]. **surface-fitting** [787]. **surfaces** [162, 324, 341, 503, 749, 830, 861, 862, 1002, 1192, 1191, 1202, 1203, 1354, 1361, 1408, 1445, 1446, 1487, 1598, 1788, 2131]. **surfactant** [227]. **survey** [1834, 1978]. **Sushi** [921]. **SVD** [822]. **SWIFT** [574]. **switching** [60]. **Sylvester** [1655]. **Symm** [901, 1510, 2213]. **Symmetric** [1034, 269, 441, 534, 631, 643, 648, 646, 841, 1905, 964, 1185, 1315, 1334, 1343, 1374, 1380, 1557, 1620, 1673, 1683, 1691, 1766, 1781, 1803, 1826, 1827, 1863, 1932, 1988, 2064, 2065, 2147]. **symmetric-triangular** [2147]. **symmetrizable** [1387]. **Symmetrization** [1604, 226]. **symmetry** [60, 467, 768, 1346, 1730, 2193].

symmetry-breaking [1730, 2193].

Symplectic

[799, 182, 501, 589, 588, 1571, 1717, 1779].

symplecticity [1187]. **system**

[23, 45, 231, 276, 437, 489, 509, 525, 603, 643, 687, 728, 776, 823, 957, 959, 1148, 1236, 1272, 1377, 1430, 1543, 1565, 1584, 1603, 1609, 1618, 1770, 1895, 1930, 2036, 2047, 2052, 2165, 2223, 2224, 2242]. **Systems** [1244, 26, 48, 51, 87, 148, 183, 187, 213, 269, 295, 316, 333, 349, 405, 421, 436, 447, 505, 516, 515, 523, 541, 561, 562, 571, 570, 577, 605, 588, 655, 691, 698, 706, 737, 768, 785, 799, 810, 844, 879, 880, 904, 940, 995, 993, 998, 1002, 1108, 1116, 1127, 1186, 1222, 1245, 1249, 1252, 1283, 1295, 1314, 1341, 1350, 1387, 1388, 1417, 1451, 1473, 1526, 1560, 1563, 1633, 1645, 1646, 1665, 1685, 1691, 1723, 1766, 1784, 1804, 1827, 1831, 1859, 1927, 1949, 1996, 2096, 2118, 2157, 2212, 2221, 2222, 1318].

Szego [1830, 743].

T [621, 1268]. **T-splines** [621]. **Takens**

[334, 1346, 1345, 2193]. **Tangential** [1210].

taut [1860]. **Taylor** [223, 432, 1654, 1988].

technical [1148]. **technique**

[433, 444, 1027, 1640, 1901]. **techniques**

[204, 436, 446, 769, 845, 1073, 1604].

temperature [1895].

temperature-dependent [1895]. **temporal**

[1386, 1609]. **Tensor**

[947, 419, 582, 803, 1210, 1361, 1599, 1655,

1909, 2046, 2063, 2232]. **Tensor-product**

[947, 2046, 2232]. **term**

[360, 371, 498, 1280, 1621]. **terms**

[558, 1007, 1066, 1262, 1967, 1987, 710]. **test**

[440, 697, 1273, 1983, 2097]. **Testing**

[2000, 634, 2117]. **tetrahedra** [1922].

tetrahedral [1470, 1957, 2023]. **textile**

[1148]. **texture** [890]. **th** [1538, 1539]. **their**

[72, 145, 564, 698, 939, 1287, 1607, 1713,

1742, 2015, 2053, 2142, 2187]. **theorem**

[145, 1330, 1868]. **theorems**

[1030, 1813, 2144]. **theoretic** [2065].

Theory [413, 626, 757, 871, 889, 1046, 1134, 1274, 1325, 1521, 1537, 1557, 2008, 2127].

There [798]. **thermistor** [1027].

thermoelastic [1282]. **theta** [141]. **thin**

[34, 95, 227, 969, 1105, 1975, 2020].

thin-walled [95, 969]. **third** [56, 607, 2244].

third-kind [56]. **third-order** [607, 2244].

Thomas [50, 805]. **three**

[70, 135, 266, 914, 1041, 1162, 1176, 1220, 1280, 1285, 1352, 1382, 1545, 1551, 1641, 1706, 1897, 1984, 1983, 2042, 2052, 2088, 2246].

three-body [1983]. **three-dimensional**

[1041, 1162, 1220, 1551, 1897, 2042, 2246].

three-dimensions [135]. **three-field** [1545].

three-fields [1641]. **three-phase** [1382].

three-stage [1984]. **three-term** [1280].

three-time-level [1352]. **Tikhonov** [358].

Time

[30, 203, 207, 220, 1033, 1109, 1126, 1674, 10, 18, 29, 49, 74, 86, 87, 124, 125, 126, 137, 144, 149, 195, 206, 210, 211, 215, 308, 305, 312, 315, 316, 326, 421, 521, 556, 593, 587, 641, 673, 709, 741, 744, 777, 794, 800, 820, 845, 851, 862, 891, 889, 930, 933, 932, 965, 992, 1000, 1026, 1034, 1031, 1044, 1049, 1054, 1162, 1175, 1181, 1200, 1215, 1219, 1221, 1228, 1236, 1252, 1282, 1293, 1312, 1328, 1352, 1356, 1364, 1365, 1366, 1369, 1372, 1387, 1395, 1407, 1417, 1423, 1430, 1434, 1443, 1446, 1447, 1454, 1464].

time

[1479, 1486, 1530, 1558, 1566, 1573, 1583, 1597, 1598, 1608, 1613, 1626, 1688, 1692, 1725, 1726, 1751, 1753, 1752, 1873, 1895, 1903, 1904, 1920, 1926, 1931, 1941, 1986, 2011, 2014, 2035, 2039, 2057, 2090, 2145, 2192, 2208, 2214, 2221, 2223, 2248, 740, 2129].

time-accuracy [1228]. **Time-dependent**

[207, 220, 10, 206, 211, 308, 312, 641, 741, 794, 1034, 1219, 1282, 1356, 1407, 1434, 1443, 1608, 1692, 2039, 2145, 740, 2129].

time-discrete [1725, 1726, 2090, 2221].

time-discretization [851]. **Time-domain**

[203, 1031, 1486]. **time-evolution** [1215].

time-fractional

[49, 593, 1293, 1366, 1423, 1752, 2248].
time-harmonic [1530, 1573, 1613, 1904].
time-marching [1200]. **time-parallel** [1215]. **time-periodic** [2039]. **time-space** [673, 1044]. **time-splitting** [215, 744, 1479].
time-stepping [18, 521, 587, 820, 1417, 1558, 1751, 1753, 1895, 1931, 2014].
time-subcycling [845]. **time-varying** [1252]. **times** [1261]. **Timoshenko** [1235].
Toda [502]. **Toeplitz** [561, 565, 1117].
Toint [1863]. **tolerance** [1242].
tomography [1370, 1854]. **tool** [958].
topology [1913]. **torsion** [303]. **Total** [238, 240, 427, 1188, 252, 387, 388, 497, 1823].
totally [397, 398]. **touching** [690, 1516].
TPFA [827]. **Trace** [1009, 1010, 1344, 2032, 1907]. **Tracking** [1826, 1520, 1924]. **trajectory** [669, 1676].
Transfer [1110, 708, 1015, 1121]. **transform** [111, 296, 657, 675, 755, 1190, 1664, 1698, 1915, 2004, 2064]. **transformation** [339, 1675, 1760, 1877, 1986, 1994, 2249].
transformations [173, 443, 1683, 1799].
transforms [93, 153, 507, 1332, 1674, 2200, 2201].
transient [270, 301, 475, 555, 1281, 2015].
transition [1000]. **transmission** [385, 490, 1224, 1385, 1690, 2198]. **transport** [3, 27, 69, 195, 400, 521, 622, 867, 868, 992, 1020, 1046, 1122, 1531, 1534, 1557, 1624, 1977]. **Transportation** [1313]. **trapezoidal** [779, 1644, 1937]. **treatment** [992, 1452, 2111]. **tree** [1473]. **tree-based** [1473]. **Trees** [492, 1913]. **Trefftz** [1454].
trial [12]. **triangle** [1308]. **triangular** [173, 767, 1708, 1957, 2038, 2147].
triangularization [2092]. **triangulation** [1928]. **triangulations** [860]. **trick** [892].
tridiagonal [706, 2017]. **Trigonometric** [1236, 1701, 163, 460]. **trilinear** [532].
trimmed [462]. **Trivariate** [381]. **Trotter** [775]. **true** [2248]. **Truncated** [1128].
Truncation [1645, 684, 1092, 1538, 1539, 1971, 2107].
Trust [80, 189, 1112, 1131, 1132, 1143, 1862, 2082, 2227]. **Trust-region** [80, 189, 1132, 2082]. **trust-region-free** [1112]. **tumour** [828]. **tuned** [999]. **Turán** [1713]. **turbulent** [1897]. **turning** [1729, 2027]. **TUSLA** [1555]. **TV** [890].
TVD [2085]. **TVNE** [2244]. **Two** [261, 314, 510, 1007, 1285, 1404, 1535, 1679, 1775, 1984, 2070, 7, 14, 25, 45, 70, 71, 135, 152, 173, 187, 211, 214, 264, 326, 336, 339, 355, 357, 385, 401, 409, 422, 427, 448, 520, 578, 579, 598, 592, 660, 727, 807, 878, 898, 928, 932, 997, 1012, 1016, 1037, 1146, 1195, 1231, 1234, 1240, 1267, 1270, 1351, 1401, 1514, 1522, 1568, 1610, 1612, 1616, 1618, 1622, 1623, 1627, 1639, 1669, 1700, 1705, 1725, 1726, 1748, 1807, 1848, 1860, 1890, 1897, 1962, 1997, 2010, 2045, 2050, 2049, 2090, 2130, 2197, 2198, 2209].
two- [135]. **two-by-two** [187].
two-dimensional [71, 152, 264, 326, 385, 401, 422, 448, 928, 932, 1231, 1240, 1351, 1401, 1514, 1610, 1616, 1669, 1725, 1726, 1807, 2197, 2198].
two-factor [1612]. **Two-grid** [510].
Two-level [1404, 2070, 598, 1679, 2209].
two-parameter [339, 1848]. **two-phase** [25, 45, 427, 520, 1037, 1270, 1639, 1890].
Two-point [261, 1007, 7, 336, 357, 578, 579, 878, 1146, 1234, 1748, 2010, 2045, 2050, 2049, 2130].
Two-scale [1535, 1775, 1568]. **Two-sided** [314]. **Two-stage** [1679, 1984, 70]. **two-step** [211, 660]. **twofold** [1039, 1048, 1052]. **type** [41, 129, 270, 340, 347, 436, 562, 635, 692, 753, 780, 820, 842, 858, 894, 994, 995, 1007, 1022, 1105, 1118, 1125, 1189, 1255, 1258, 1270, 1309, 1351, 1394, 1430, 1469, 1480, 1499, 1523, 1571, 1587, 1621, 1622, 1642, 1646, 1666, 1669, 1700, 1717, 1795, 1805, 1938, 2000, 2023, 2032, 2041, 2063, 2088, 2132, 2141, 2143, 2173, 2200, 2201, 2204, 2207, 2241, 745, 145, 696, 791, 797, 1115, 1194, 1375, 1710, 1972, 2029, 2028, 2050, 2049].
type-6 [2023]. **type-II** [894].

ultraspherical [1189, 1884]. **Unbiased** [1478]. **unbounded** [1347, 1844, 1725, 1726]. **uncertain** [1612, 1851]. **uncertainty** [52, 682, 1122, 1361]. **Unconditional** [1220]. **Unconditionally** [644, 202, 1413, 1533, 1612, 1616]. **unconstrained** [142, 720, 1862, 2079, 2229]. **underdetermined** [665, 1212]. **underflow** [961]. **understanding** [376]. **unfitted** [237, 239, 480, 478, 524, 806, 969, 1501, 2002, 2129]. **unfitted-mesh** [969]. **unidimensional** [818, 1547, 1815]. **Unified** [1255, 1328, 2219, 533, 657, 755, 797, 889, 1444, 1527, 1566, 2084, 710]. **Uniform** [474, 563, 696, 709, 786, 800, 1006, 1102, 1432, 1617, 1753, 1841, 2013, 2145, 2207, 2230, 215, 324, 411, 564, 913, 950, 1228, 1312, 1463, 1707, 1941, 1958]. **uniform-in-time** [1312]. **Uniformly** [2244, 1, 35, 570, 599, 641, 1618, 2055]. **unilateral** [118, 290, 792, 2070]. **unipolar** [508]. **uniqueness** [2154]. **unit** [473, 906, 1207, 1635, 1842]. **Unitarity** [1349]. **unitary** [1302]. **unity** [873]. **Univariate** [265, 465, 770, 771]. **unknown** [1214, 1950]. **unsteady** [545, 807, 1870, 2048, 712, 272]. **unstructured** [920, 1889]. **unsymmetric** [598]. **updates** [1444, 1932, 2239, 2240]. **Updating** [1937, 1803, 1863]. **upper** [1937]. **Upwind** [1409, 27, 91, 397, 398, 400, 459, 546, 558, 1299, 1564, 1617, 1707, 1917, 1930]. **upwind-** [1707]. **upwinding** [2086]. **Use** [1467, 172, 206, 1207, 1444, 1872, 2004]. **user** [1993]. **user-friendly** [1993]. **Using** [705, 2104, 2, 53, 141, 220, 237, 339, 380, 418, 465, 505, 506, 517, 621, 672, 695, 706, 732, 788, 854, 899, 904, 921, 949, 1035, 1106, 1279, 1290, 1365, 1400, 1498, 1580, 1593, 1615, 1667, 1688, 1697, 1711, 1770, 2020, 2029, 2028, 2237, 748]. **Uzawa** [1699]. **Uzawa-based** [1699].

V [1308]. **validity** [473]. **valuation** [1292, 2255]. **value** [7, 63, 64, 91, 130, 246, 285, 289, 336, 337, 357, 397, 398, 400, 578, 579, 609, 593, 584, 618, 664, 755, 878, 1039, 1078, 1082, 1136, 1137, 1146, 1234, 1276, 1303, 1343, 1351, 1485, 1617, 1662, 1724, 1748, 1853, 1870, 2010, 2045, 2050, 2049, 2054, 2055, 2125, 2130, 2182, 2114, 2107, 2108]. **valued** [295, 859, 1133, 1431, 1511, 2203]. **values** [1353, 1982]. **Vandermonde** [1244, 2118]. **Vandermonde-like** [1244]. **vanishing** [454]. **Variable** [375, 81, 149, 197, 271, 321, 379, 421, 501, 517, 606, 618, 657, 704, 1035, 1157, 1384, 1383, 1549, 1583, 1802, 1856, 1938, 2213, 2228, 2248]. **variable-degree** [606]. **variable-metric** [704]. **variable-order** [2248]. **variable-step** [501]. **variables** [864, 1544]. **variably** [402]. **variance** [681]. **variant** [911, 1130]. **variants** [1622, 2009]. **variate** [1136]. **variation** [252, 387, 388, 497, 903, 1188]. **Variational** [1221, 1434, 1451, 1542, 1912, 1926, 1931, 1959, 2069, 178, 220, 248, 246, 383, 391, 604, 627, 707, 876, 891, 893, 1039, 1089, 1233, 1262, 1265, 1394, 1414, 1508, 1507, 1522, 1757, 1758, 1779, 1797, 1825, 1946, 1956, 2035, 2063, 2070]. **variational-hemivariational** [707]. **variational-iterative** [1946]. **Variational-splitting** [1434]. **varieties** [2117]. **varying** [544, 758, 1252]. **Vector** [1133, 168, 948, 1203, 1344, 1733, 2021, 2061, 2077]. **vector-Laplace** [1344]. **Vector-valued** [1133]. **vectors** [2, 822, 1080, 2060]. **velocity** [427, 493, 1561]. **velocity-based** [427]. **VEM** [271]. **VEMs** [1527]. **Vera** [1095]. **Verification** [443]. **version** [259, 324, 1065, 1063, 1198, 1239, 1277, 1755, 1957, 2188]. **versions** [2033]. **versus** [679, 1120, 1136, 1137, 1242]. **vertex** [905, 1032, 1042]. **vertex-centered** [905]. **very** [662]. **via** [207, 296, 423, 583, 658, 659, 810, 844, 1146, 1215, 1361, 1394, 1423, 1664, 1674, 1675, 1764, 1785, 2205]. **vibration**

- [299, 1235]. **vibrations** [253]. **Vibro** [1868]. **Vibro-impact** [1868]. **VIEs** [56]. **viewpoint** [971]. **Virtual** [122, 512, 726, 1038, 2136, 77, 120, 493, 514, 615, 758, 759, 1001, 1505, 1690, 1737, 1736, 2137, 2138, 713, 711, 273]. **viscoelastic** [220, 2208]. **viscoelasticity** [31, 1490]. **viscoplastic** [1494]. **viscosity** [1162, 1257]. **viscosity-splitting** [1162]. **viscous** [399, 1411, 1841]. **Vlasov** [213, 605, 1544, 1902, 817]. **volatilities** [1292]. **volatility** [1612, 1851]. **Volterra** [1630, 190, 196, 281, 348, 449, 448, 452, 450, 451, 709, 797, 1153, 1189, 1287, 1294, 1339, 1390, 1528, 1549, 1594, 1595, 1596, 1611, 1629, 1669, 1898, 1972, 1981, 2067, 2141, 2180, 2207, 2233, 2072, 2111]. **Volterra-type** [797, 1972]. **Volume** [97, 3, 25, 89, 99, 140, 330, 329, 335, 399, 400, 404, 427, 498, 508, 520, 533, 547, 557, 555, 554, 556, 571, 573, 622, 651, 728, 823, 827, 830, 905, 919, 920, 923, 922, 959, 1032, 1233, 1292, 1387, 1388, 1401, 1476, 1603, 1742, 1756, 1770, 1784, 1824, 1945, 2020, 2149, 2217, 2218, 2219, 2232, 2255, 101, 104, 106, 108]. **volume-preserving** [2232]. **volumes** [509, 710]. **volumetric** [1496]. **Vortex** [2019, 2237]. **vortices** [897, 2044]. **vorticity** [78, 307, 1610]. **Vries** [677, 820, 1266, 1474, 1805, 1961].
- W** [110]. **Waals** [227]. **Wachspress** [1115]. **Wachspress-type** [1115]. **WAF** [2076]. **walk** [871, 1478]. **walk-on-sphere** [1478]. **walled** [95, 969]. **Warming** [2084]. **Warming-Beam** [2084]. **water** [123, 124, 300, 389, 1231, 1870]. **waterbag** [328]. **Wave** [384, 111, 193, 260, 291, 296, 543, 568, 576, 656, 726, 811, 857, 903, 933, 932, 931, 936, 962, 965, 1057, 1062, 1109, 1152, 1181, 1215, 1255, 1256, 1258, 1265, 1281, 1282, 1317, 1361, 1454, 1491, 1571, 1622, 1623, 1628, 1698, 1725, 1726, 1755, 1870, 1882, 1971, 2143, 2170, 2188, 2208, 2236]. **Wave-number** [384]. **wave-packet** [111, 1698]. **wave-structure** [1281]. **wave-thermoelastic** [1282]. **wave-type** [1255, 1258, 1622]. **waveform** [1936, 2192]. **waveguide** [1496]. **Wavelet** [318, 446, 714, 574, 582, 912, 916, 2034, 2179]. **Wavelet-based** [714, 574, 912]. **Wavelet-Fourier** [446]. **wavelets** [1768]. **Wavenumber** [576, 1613]. **waves** [210, 913, 1017]. **Weak** [182, 461, 569, 602, 670, 1441, 1735, 1811, 2152, 68, 180, 359, 440, 1172, 1700, 1745]. **weakly** [215, 324, 348, 449, 565, 600, 662, 791, 1294, 1528, 1543, 1549, 1754, 1784, 1848, 2033, 2067, 2072]. **Weber** [1074]. **wedge** [157]. **Weierstrass** [674]. **weight** [568, 1659, 1830]. **Weighted** [479, 1828, 116, 224, 910, 1093, 1243, 1347, 1704, 1776, 1881, 2065, 2066]. **weights** [982, 1416, 1830, 2091]. **Weiner** [1657]. **Weiner-Hopf** [1657]. **Well** [26, 1755, 548, 662, 1080, 1777, 1933]. **well-conditioned** [1080]. **well-posed** [662, 1933]. **Well-posedness** [26, 1755]. **well-reservoir** [548]. **Wendroff** [1587, 2084]. **Wendroff-type** [1587]. **Wentzell** [212]. **were** [1173]. **Westervelt** [1395]. **which** [1117, 2253]. **white** [362, 1214, 1579]. **whole** [2091]. **Wick** [1642]. **wide** [1862]. **wider** [1116]. **widths** [654]. **Wiener** [846, 1121]. **Willmore** [246]. **Wilson** [596]. **Wimbledon** [110, 110]. **Winther** [526]. **withdrawal** [1300]. **without** [612, 1025, 1196, 1480, 1790, 1861, 1995, 2248]. **work** [838, 843]. **worst** [703, 1829]. **worst-case** [703]. **Wrap** [1222]. **Wrap-around** [1222].
- Xin** [1973].
- years** [1095]. **Yee** [1889]. **Yee-like** [1889]. **yielding** [1051]. **Yosida** [1179].

Zakharov [1236, 2047]. `zeros` [76, 769, 1123, 1327, 1656, 1657, 1951, 1977].

References

- [1] Bilal Abbasi and Adam M. Oberman. A partial differential equation for the $|\epsilon|$ -uniformly quasiconvex envelope. *IMA Journal of Numerical Analysis*, 39(1):141–166, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/141/4641667>.

- [2] Mokhtar Abbasi, Mahdi Ahmadinia, and Ali Ahmadinia. A new step size selection strategy for the superiorization methodology using subgradient vectors and its application for solving convex constrained optimization problems. *IMA Journal of Numerical Analysis*, 44(5):2997–3027, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2997/7296118>.

- [3] Dilara Abdel, Claire Chainais-Hillairet, Patricio Farrell, and Maxime Herda. Numerical analysis of a finite volume scheme for charge transport in perovskite solar cells. *IMA Journal of Numerical Analysis*, 44(2):1090–1129, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/1090/7192241>.

- [4] Assyr Abdulle and Yun Bai. Fully discrete analysis of the heterogeneous multiscale method for elliptic problems with multiple scales. *IMA Journal of Numerical Analysis*, 35(1):133–160, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://oxfordjournals.org/content/35/1/133>.

- [5] Assyr Abdulle, Charles-Edouard Bréhier, and Gilles Vilmart. Convergence analysis of explicit stabilized integrators for parabolic semilinear stochastic PDEs. *IMA Journal of Numerical Analysis*, 43(1):258–292, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/258/6459386>.

- [6] M. J. Ablowitz, B. M. Herbst, and J. A. C. Weideman. Dynamics of semi-discretizations of the defocusing nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 11(4):539–552, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

- [7] I. T. Abu-Zaid and M. A. El-Gebeily. A finite-difference method for the spectral approximation of a class of singular two-point boundary value problems. *IMA Journal of Numerical Analysis*, 14(4):545–562, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Accebron:2001:SAC

- [8] Juan A. Acebrón, Mikhail M. Lavrentiev, Jr., and Renato Spigler. Spectral analysis and computation for the Kuramoto-Sakaguchi integroparabolic equation. *IMA Journal of Numerical Analysis*, 21(1):239–263, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210239.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210239.pdf.

Aceto:2022:FAA

- [9] Lidia Aceto and Paolo Novati. Fast and accurate approximations to fractional powers of operators. *IMA Journal of Numerical Analysis*, 42(2):1598–1622, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1598/6140849>.

Acevedo:2011:BMF

- [10] Ramiro Acevedo and Salim Meddahi. An E-based mixed FEM and BEM coupling for a time-dependent eddy current problem. *IMA Journal of Numerical Analysis*, 31(2):667–697, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/667.full.pdf+html>.

Achdou:1993:MNS

- [11] Yves Achdou and Olivier Pironneau. The χ -method for the Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 13(4):537–558, 1993.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Acker:1988:CRA

- [12] Andrew Acker. Convergence results for an analytical trial free-boundary method. *IMA Journal of Numerical Analysis*, 8(3):357–364, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ackleh:2023:FDS

- [13] Azmy S. Ackleh, Rainey Lyons, and Nicolas Saintier. Finite difference schemes for a size structured coagulation-fragmentation model in the space of Radon measures. *IMA Journal of Numerical Analysis*, 43(6):3357–3395, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3357/6834123>.

Acosta:2012:DSS

- [14] Carlos D. Acosta and Raimund Bürger. Difference schemes stabilized by discrete mollification for degenerate parabolic equations in two space dimensions. *IMA Journal of Numerical Analysis*, 32(4):1509–1540, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1509.full.pdf+html>.

Acosta:2014:EPN

- [15] Gabriel Acosta and María G. Armentano. Eigenvalue problems in a non-Lipschitz domain. *IMA Journal of Numerical Analysis*, 34(1):83–95, January 2014. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/83.full.pdf+html>.

Acosta:2019:FEA

- [16] Gabriel Acosta, Juan Pablo Borthagaray, and Norbert Heuer. Finite element approximations of the nonhomogeneous fractional Dirichlet problem. *IMA Journal of Numerical Analysis*, 39(3):1471–1501, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1471/4990927>.

Actis:2016:NDF

- [17] Marcelo Actis, Pedro Morin, and Marilina Carena. Nonlocal diffusions on fractals: qualitative properties and numerical approximations. *IMA Journal of Numerical Analysis*, 36(3):1143–1166, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1143>.

Actis:2023:ACA

- [18] Marcelo Actis, Pedro Morin, and Cornelia Schneider. On approximation classes for adaptive time-stepping finite element methods. *IMA Journal of Numerical Analysis*, 43(5):2817–2855, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2817/6702471>.

Adam:1991:PIR

- [19] Gh. Adam and A. Nobile. Product integration rules at Clenshaw–Curtis and

related points: a robust implementation. *IMA Journal of Numerical Analysis*, 11(2):271–296, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Adam:2019:SNM

- [20] L. Adam, M. Hintermüller, and T. M. Surowiec. A semismooth Newton method with analytical path-following for the H^1 -projection onto the Gibbs simplex. *IMA Journal of Numerical Analysis*, 39(3):1276–1295, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1276/5032993>.

Adcock:2012:HOR

- [21] Ben Adcock, Arieh Iserles, and Syvert P. Nørsett. From high oscillation to rapid approximation II: expansions in Birkhoff series. *IMA Journal of Numerical Analysis*, 32(1):105–140, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/105.full.pdf+html>.

Adcock:2019:OSR

- [22] Ben Adcock, Rodrigo B. Platte, and Alexei Shadrin. Optimal sampling rates for approximating analytic functions from pointwise samples. *IMA Journal of Numerical Analysis*, 39(3):1360–1390, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1360/5001154>.

Adler:2016:FOS

- [23] James Adler, Scott MacLachlan, and Niall Madden. A first-order system Petrov–Galerkin discretization for a reaction-diffusion problem on a fitted mesh. *IMA Journal of Numerical Analysis*, 36(3):1281–1309, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1281>.

Adler:2002:NMR

- [24] Roy L. Adler, Jean-Pierre Dedieu, Joseph Y. Margulies, Marco Martens, and Mike Shub. Newton’s method on Riemannian manifolds and a geometric model for the human spine. *IMA Journal of Numerical Analysis*, 22(3):359–390, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220359.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220359.pdf.

Agelas:2022:CNF

- [25] Léo Agélas, Martin Schneider, Guillaume Enchéry, and Bernd Flemisch. Convergence of nonlinear finite volume schemes for two-phase porous media flow on general meshes. *IMA Journal of Numerical Analysis*, 42(1):515–568, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/515/5916933>.

Aggarwal:2024:WPE

- [26] Aekta Aggarwal, Helge Holden, and

Ganesh Vaidya. Well-posedness and error estimates for coupled systems of nonlocal conservation laws. *IMA Journal of Numerical Analysis*, 44(6):3354–3392, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3354/7542429>.

Aguillon:2018:EEU

- [27] Nina Aguillon and Franck Boyer. Error estimate for the upwind scheme for the linear transport equation with boundary data. *IMA Journal of Numerical Analysis*, 38(2):669–719, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/669/3767777>.

Ahmed:1985:FAP

- [28] A. H. Ahmed and K. Wright. Further asymptotic properties of collocation matrix norms. *IMA Journal of Numerical Analysis*, 5(2):235–246, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ahmed:2021:HOD

- [29] Naveed Ahmed and Gunar Matthies. Higher-order discontinuous Galerkin time discretizations for the evolutionary Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 41(4):3113–3144, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/3113/5897816>.

Ahmed:2017:AFS

- [30] Naveed Ahmed, Tomás Chacón Rebollo, Volker John, and Samuele Rubino. Analysis of a full space-time discretization of the Navier–Stokes equations by a local projection stabilization method. *IMA Journal of Numerical Analysis*, 37(3):1437–1467, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1437/2670061/Analysis-of-a-Full-Space-Time-Discretization-of>.

Ahn:2009:DFC

- [31] Jeongho Ahn and David E. Stewart. Dynamic frictionless contact in linear viscoelasticity. *IMA Journal of Numerical Analysis*, 29(1):43–71, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ainsworth:1997:PPC

- [32] M. Ainsworth, D. W. Kelly, I. H. Sloan, and S. L. Wang. Post-processing with computable error bounds for the finite element approximation of a nonlinear heat conduction problem. *IMA Journal of Numerical Analysis*, 17(4):547–561, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170547.sgm.abs.html.

Ainsworth:2012:CEB

- [33] Mark Ainsworth, Alejandro Allendes, Gabriel R. Barrenechea, and Richard Rankin. Computable error bounds for nonconforming Fortin–Soulie finite element approximation

of the Stokes problem. *IMA Journal of Numerical Analysis*, 32(2):417–447, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/417.full.pdf+html>.

Ainsworth:2001:CEB

- [34] Mark Ainsworth and Mark Arnold. Computable error bounds for some simple dimensionally reduced models on thin domains. *IMA Journal of Numerical Analysis*, 21(1):81–105, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210081.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210081.pdf.

Ainsworth:2002:USF

- [35] Mark Ainsworth and Patrick Coggins. A uniformly stable family of mixed hp finite elements with continuous pressures for incompressible flow. *IMA Journal of Numerical Analysis*, 22(2):307–327, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220307.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220307.pdf.

Ainsworth:2011:CFE

- [36] Mark Ainsworth and Richard Rankin. Constant free error bounds for nonuniform order discontinuous Galerkin finite-element approximation on locally refined meshes with hanging nodes. *IMA Journal of Numerical*

ical Analysis, 31(1):254–280, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/254.full.pdf+html>.

Ainsworth:2017:CEB

- [37] Mark Ainsworth and Richard Rankin. Computable error bounds for finite element approximation on nonpolygonal domains. *IMA Journal of Numerical Analysis*, 37(2):604–645, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/604/2670033/Computable-error-bounds-for-finite-element>.

Aitchison:1984:NMP

- [38] J. M. Aitchison. Numerical modelling of PIN diodes. *IMA Journal of Numerical Analysis*, 4(1):43–53, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Akinola:2014:CJB

- [39] Richard O. Akinola, Melina A. Freitag, and Alastair Spence. The computation of Jordan blocks in parameter-dependent matrices. *IMA Journal of Numerical Analysis*, 34(3):955–976, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/955>.

Akrivis:2018:SII

- [40] Georgios Akrivis. Stability of implicit and implicit-explicit multistep methods for nonlinear parabolic equations. *IMA*

Journal of Numerical Analysis, 38(4):1768–1796, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1768/4321720>.

Akrivis:2016:LIS

- [41] Georgios Akrivis, Anna Kalogirou, Demetrios T. Papageorgiou, and Yiorgos-Sokratis Smyrlis. Linearly implicit schemes for multi-dimensional Kuramoto–Sivashinsky type equations arising in falling film flows. *IMA Journal of Numerical Analysis*, 36(1):317–336, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/317>.

Akrivis:2018:MNA

- [42] Georgios Akrivis and Buyang Li. Maximum norm analysis of implicit–explicit backward difference formulae for nonlinear parabolic equations. *IMA Journal of Numerical Analysis*, 38(1):75–101, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/75/3077045>.

Akrivis:2021:LFE

- [43] Georgios Akrivis and Buyang Li. Linearization of the finite element method for gradient flows by Newton’s method. *IMA Journal of Numerical Analysis*, 41(2):1411–1440, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1411/5869503>.

Akrivis:2022:EEF

- [44] Georgios Akrivis and Buyang Li. Error estimates for fully discrete BDF finite element approximations of the Allen–Cahn equation. *IMA Journal of Numerical Analysis*, 42(1):363–391, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/363/5917449>.

Akrivis:2011:LIM

- [45] Georgios Akrivis, Demetrios T. Papa-georgiou, and Yiorgos-Sokratis Smyrlis. Linearly implicit methods for a semi-linear parabolic system arising in two-phase flows. *IMA Journal of Numerical Analysis*, 31(1):299–321, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/299.full.pdf+html>.

Akrivis:1993:FDD

- [46] Georgios D. Akrivis. Finite difference discretization of the cubic Schrödinger equation. *IMA Journal of Numerical Analysis*, 13(1):115–124, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Al-Baali:1985:DPG

- [47] M. Al-Baali. Descent property and global convergence of the Fletcher–Reeves method with inexact line search. *IMA Journal of Numerical Analysis*, 5(1):121–124, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

AlDaas:2019:EGS

- [48] Hussam Al Daas, Laura Grigori, Pascal Hénon, and Philippe Ricoux. Enlarged GMRES for solving linear systems with one or multiple right-hand sides. *IMA Journal of Numerical Analysis*, 39(4):1924–1956, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1924/5078636>.

Al-Maskari:2022:TFC

- [49] Mariam Al-Maskari and Samir Karaa. The time-fractional Cahn–Hilliard equation: analysis and approximation. *IMA Journal of Numerical Analysis*, 42(2):1831–1865, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1831/6277317>.

Al-Zanaidi:1996:MET

- [50] M. Al-Zanaidi, C. Grossmann, and R. L. Voller. Monotonous enclosures for the Thomas–Fermi equation in the isolated neutral atom case. *IMA Journal of Numerical Analysis*, 16(3):413–434, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160413.sgm.abs.html.

Alaa:2013:CED

- [51] Nour Eddine Alaa and Morgan Pierre. Convergence to equilibrium for discretized gradient-like systems with analytic features. *IMA Journal of Numerical Analysis*, 33(4):1291–1321, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

(electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1291.full.pdf+html>.

Alaiz:2015:CMN

- [52] Carlos M. Alaíz, Francesco Dinuzzo, and Suvrit Sra. Correlation matrix nearness and completion under observation uncertainty. *IMA Journal of Numerical Analysis*, 35(1):325–340, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/325>.

Alfonsi:2024:HOA

- [53] Aurélien Alfonsi and Edoardo Lombardo. High order approximations of the Cox–Ingersoll–Ross process semigroup using random grids. *IMA Journal of Numerical Analysis*, 44(4):2277–2322, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2277/7246577>.

Ali:2020:OCE

- [54] Ahmad Ahmad Ali, Michael Hinze, and Heiko Kröner. Optimal control of elliptic surface PDEs with pointwise bounds on the state. *IMA Journal of Numerical Analysis*, 40(1):226–246, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/226/5301318>.

Ali:2022:EHS

- [55] Mazen Ali, Stefan A. Funken, and Anja Schmidt. H^1 -stability of the L^2 -projection onto finite element spaces

on adaptively refined quadrilateral meshes. *IMA Journal of Numerical Analysis*, 42(3):2684–2709, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2684/6309166>.

Allaei:2017:CMT

- [56] Sonia Seyed Allaei, Zhan-Wen Yang, and Hermann Brunner. Collocation methods for third-kind VIEs. *IMA Journal of Numerical Analysis*, 37(3):1104–1124, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1104/2670013/Collocation-methods-for-third-kind-VIEs>.

Allendes:2020:AFE

- [57] A. Allendes, F. Fuica, and E. Otárola. Adaptive finite element methods for sparse PDE-constrained optimization. *IMA Journal of Numerical Analysis*, 40(3):2106–2142, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/2106/5506756>.

Allendes:2024:DPC

- [58] Alejandro Allendes, Gilberto Campaña, Francisco Fuica, and Enrique Otárola. Darcy’s problem coupled with the heat equation under singular forcing: analysis and discretization. *IMA Journal of Numerical Analysis*, 44(6):3683–3716, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3683/7512101>.

Allendes:2016:EEL

- [59] Alejandro Allendes, Francisco Durán, and Richard Rankin. Error estimation for low-order adaptive finite element approximations for fluid flow problems. *IMA Journal of Numerical Analysis*, 36(4):1715–1747, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1715>.

Allgower:1994:BSC

- [60] Eugene Allgower, Klaus Böhmer, and Mei Zhen. Branch switching at a corank-4 bifurcation point of semilinear elliptic problems with symmetry. *IMA Journal of Numerical Analysis*, 14(2):161–182, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Almacany:1984:DCA

- [61] M. Almacany, C. B. Dunham, and J. Williams. Discrete Chebyshev approximation by interpolating rationals. *IMA Journal of Numerical Analysis*, 4(4):467–477, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Almonacid:2020:FMF

- [62] Javier A. Almonacid, Hugo S. Díaz, Gabriel N. Gatica, and Antonio Márquez. A fully mixed finite element method for the coupling of the Stokes and Darcy–Forchheimer problems. *IMA Journal of Numerical Analysis*, 40(2):1454–1502, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL

<http://academic.oup.com/imajna/article/40/2/1454/5304850>.

Alonso-Mallo:2017:AOR

- [63] I. Alonso-Mallo, B. Cano, and N. Reguera. Avoiding order reduction when integrating linear initial boundary value problems with Lawson methods. *IMA Journal of Numerical Analysis*, 37(4):2091–2119, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2091/2422321>.

Alonso-Mallo:2018:AOR

- [64] I. Alonso-Mallo, B. Cano, and N. Reguera. Avoiding order reduction when integrating linear initial boundary value problems with exponential splitting methods. *IMA Journal of Numerical Analysis*, 38(3):1294–1323, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1294/4085564>.

Altmann:2022:CGS

- [65] Robert Altmann and Roland Herzog. Continuous Galerkin schemes for semiexplicit differential-algebraic equations. *IMA Journal of Numerical Analysis*, 42(3):2214–2237, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2214/6277325>.

Altmann:2023:BSL

- [66] Robert Altmann, Balázs Kovács, and Christoph Zimmer. Bulk-surface Lie splitting for parabolic problems with

dynamic boundary conditions. *IMA Journal of Numerical Analysis*, 43(2):950–975, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/950/6550477>.

Altmann:2024:SOB

- [67] Robert Altmann and Christoph Zimmer. A second-order bulk-surface splitting for parabolic problems with dynamic boundary conditions. *IMA Journal of Numerical Analysis*, 44(4):2370–2393, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2370/7241148>.

Altmayer:2017:DHM

- [68] Martin Altmayer and Andreas Neuenkirch. Discretising the Heston model: an analysis of the weak convergence rate. *IMA Journal of Numerical Analysis*, 37(4):1930–1960, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1930/2894466>.

Alvarez:2021:MPF

- [69] Mario Alvarez, Gabriel N. Gatica, and Ricardo Ruiz-Baier. A mixed-primal finite element method for the coupling of Brinkman–Darcy flow and nonlinear transport. *IMA Journal of Numerical Analysis*, 41(1):381–411, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/381/5771306>.

Amat:2022:TSA

- [70] Sergio Amat, David Levin, and Juan Ruiz-Álvarez. A two-stage approximation strategy for piecewise smooth functions in two and three dimensions. *IMA Journal of Numerical Analysis*, 42(4):3330–3359, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3330/6374288>.

Amat:2023:GEA

- [71] Sergio Amat, David Levin, Juan Ruiz-Álvarez, and Dionisio F Yáñez. Global and explicit approximation of piecewise-smooth two-dimensional functions from cell-average data. *IMA Journal of Numerical Analysis*, 43(4):2299–2319, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2299/6657659>.

Amestoy:2023:MPL

- [72] Patrick Amestoy, Olivier Boiteau, Alfredo Buttari, Matthieu Gerest, Fabienne Jézéquel, Jean-Yves L’Excellent, and Theo Mary. Mixed precision low-rank approximations and their application to block low-rank *LU* factorization. *IMA Journal of Numerical Analysis*, 43(4):2198–2227, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2198/6667623>.

Amiraslani:2009:LMP

- [73] A. Amiraslani, R. M. Corless, and P. Lancaster. Linearization of matrix polynomials expressed in polyno-

mial bases. *IMA Journal of Numerical Analysis*, 29(1):141–157, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Amrein:2017:AST

- [74] Mario Amrein and Thomas P. Wihler. An adaptive space-time Newton–Galerkin approach for semilinear singularly perturbed parabolic evolution equations. *IMA Journal of Numerical Analysis*, 37(4):2004–2019, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2004/2670067>.

An:2022:ABE

- [75] Rong An and Weiwei Sun. Analysis of backward Euler projection FEM for the Landau–Lifshitz equation. *IMA Journal of Numerical Analysis*, 42(3):2336–2360, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2336/6278230>.

Anastasselou:1986:FCD

- [76] Eleni G. Anastasselou. A formal comparison of the Delves-Lyness and Burniston-Siewert methods for locating the zeros of analytic functions. *IMA Journal of Numerical Analysis*, 6(3):337–341, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Anaya:2020:VEM

- [77] Verónica Anaya, Mostafa Bendahmane, David Mora, and Mauricio Sepúlveda. A virtual element method

for a nonlocal FitzHugh–Nagumo model of cardiac electrophysiology. *IMA Journal of Numerical Analysis*, 40(2):1544–1576, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1544/5309005>.

Anaya:2017:PVF

- [78] Verónica Anaya, David Mora, and Ricardo Ruiz-Baier. Pure vorticity formulation and Galerkin discretization for the Brinkman equations. *IMA Journal of Numerical Analysis*, 37(4):2020–2041, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2020/2670308>.

Anderson:2015:ARB

- [79] David F. Anderson and Masanori Koyama. An asymptotic relationship between coupling methods for stochastically modeled population processes. *IMA Journal of Numerical Analysis*, 35(4):1757–1778, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1757>.

Andreani:2008:TRS

- [80] R. Andreani, J. M. Martínez, and L. Martínez. Trust-region superposition methods for protein alignment. *IMA Journal of Numerical Analysis*, 28(4):690–710, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/690>.

Andreani:2005:SPG

- [81] Roberto Andreani, Ernesto G. Birgin, José Mario Martínez, and Jinyun Yuan. Spectral projected gradient and variable metric methods for optimization with linear inequalities. *IMA Journal of Numerical Analysis*, 25(2):221–252, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/221>; <http://imanum.oupjournals.org/cgi/reprint/25/2/221>.

Andreani:2017:ESO

- [82] Roberto Andreani, Gabriel Haeser, Alberto Ramos, and Paulo J. S. Silva. Erratum: “A second-order sequential optimality condition associated to the convergence of optimization algorithms”. *IMA Journal of Numerical Analysis*, 37(4):e1–??, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/e1/3859208>. See [83].

Andreani:2017:SOS

- [83] Roberto Andreani, Gabriel Haeser, Alberto Ramos, and Paulo J. S. Silva. A second-order sequential optimality condition associated to the convergence of optimization algorithms. *IMA Journal of Numerical Analysis*, 37(4):1902–1929, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1902/2929533>. See erratum [82].

Andreani:2022:CAL

- [84] Roberto Andreani, Alberto Ramos, Ademir A. Ribeiro, Leonardo D. Secchin, and Ariel R. Velazco. On the convergence of augmented Lagrangian strategies for nonlinear programming. *IMA Journal of Numerical Analysis*, 42(2):1735–1765, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1735/6254234>.

Andreev:2004:IFE

- [85] Andrey B. Andreev and Todor D. Todorov. Isoparametric finite-element approximation of a Steklov eigenvalue problem. *IMA Journal of Numerical Analysis*, 24(2):309–322, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240309.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240309.pdf.

Andreev:2013:SSS

- [86] Roman Andreev. Stability of sparse space–time finite element discretizations of linear parabolic evolution equations. *IMA Journal of Numerical Analysis*, 33(1):242–260, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/242.full.pdf+html>.

Andreia:2024:ATS

- [87] Merlin Andreia and Christian Meyer. An adaptive time stepping scheme for

rate-independent systems with nonconvex energy. *IMA Journal of Numerical Analysis*, 44(1):435–465, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/435/7071697>.

Andreianov:2012:DDG

- [88] Boris Andreianov, Mostafa Bendahmane, Florence Hubert, and Stella Krell. On 3D DDFV discretization of gradient and divergence operators. I. Meshing, operators and discrete duality. *IMA Journal of Numerical Analysis*, 32(4):1574–1603, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1574.full.pdf+html>.

Andreianov:2006:FVA

- [89] Boris Andreianov, Franck Boyer, and Florence Hubert. On the finite-volume approximation of regular solutions of the p -Laplacian. *IMA Journal of Numerical Analysis*, 26(3):472–502, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/472>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/472>.

Andreianov:2024:NDD

- [90] Boris Andreianov and El Houssaine Quenjel. Nodal discrete duality numerical scheme for nonlinear diffusion problems on general meshes. *IMA Journal of Numerical Analysis*, 44(3):1597–1643, May 2024. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1597/7199099>.

Angermann:1992:PES

- [91] Lutz Angermann. An a posteriori estimation for the solution of elliptic boundary value problems by means of upwind FEM. *IMA Journal of Numerical Analysis*, 12(2):201–215, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Angermann:1995:EEF

- [92] Lutz Angermann. Error estimates for the finite-element solution of an elliptic singularly perturbed problem. *IMA Journal of Numerical Analysis*, 15(2):161–196, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Annaby:2015:EEA

- [93] M. H. Annaby and R. M. Asharabi. Error estimates associated with sampling series of the linear canonical transforms. *IMA Journal of Numerical Analysis*, 35(2):931–946, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/931>.

Annaby:2007:CES

- [94] M. H. Annaby and M. M. Tharwat. On computing eigenvalues of second-order linear pencils. *IMA Journal of Numerical Analysis*, 27(2):366–380, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/27/2/366>.

oxfordjournals.org/cgi/content/abstract/27/2/366; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/366>.

Annese:2023:SSL

- [95] Michele Annese, Miguel A. Fernández, and Lucia Gastaldi. Splitting schemes for a Lagrange multiplier formulation of FSI with immersed thin-walled structure: stability and convergence analysis. *IMA Journal of Numerical Analysis*, 43(2):881–919, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/881/6549750>.

Anonymous:1985:FPC

- [96] Anonymous. 1985 L. Fox prize: Call for entries. *IMA Journal of Numerical Analysis*, 5(1):1, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Anonymous:1985:IV

- [97] Anonymous. Index to volume 5. *IMA Journal of Numerical Analysis*, 5(4):501–502, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Anonymous:1985:R

- [98] Anonymous. Referees 1984–85. *IMA Journal of Numerical Analysis*, 5(4):499–500, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Anonymous:1999:IV

- [99] Anonymous. Index to volume 19. *IMA Journal of Numerical Analysis*, 19(4):

669–670, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190665.pdf.

Anonymous:1999:R

- [100] Anonymous. Referees 1998–99. *IMA Journal of Numerical Analysis*, 19(4):665–667, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190665.pdf.

Anonymous:2002:IV

- [101] Anonymous. Index to Volume 22. *IMA Journal of Numerical Analysis*, 22(4):669–670, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220669.pdf.

Anonymous:2002:R

- [102] Anonymous. Referees 2001–2002. *IMA Journal of Numerical Analysis*, 22(4):665–667, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220665.pdf.

Anonymous:2004:E

- [103] Anonymous. Editorial. *IMA Journal of Numerical Analysis*, 24(1):i–??, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/24000i.pdf.

Anonymous:2004:IV

- [104] Anonymous. Index to Volume 24. *IMA Journal of Numerical Analysis*, 24(4):725–726, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/reprint/24/4/725>.

Anonymous:2004:R

- [105] Anonymous. Referees 2003–2004. *IMA Journal of Numerical Analysis*, 24(4):721–724, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/reprint/24/4/721>.

Anonymous:2005:IV

- [106] Anonymous. Index to Volume 25. *IMA Journal of Numerical Analysis*, 25(4):847–849, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/847>.

Anonymous:2005:R

- [107] Anonymous. Referees 2004–2005. *IMA Journal of Numerical Analysis*, 25(4):843–845, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/843>.

Anonymous:2006:IV

- [108] Anonymous. Index to Volume 26. *IMA Journal of Numerical Analysis*, 26(4):851–853, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/cgi/reprint/26/4/851>; <http://imanum.oxfordjournals.org/cgi/reprint/26/4/851>.

Anonymous:2006:R

- [109] Anonymous. Referees 2005–2006. *IMA Journal of Numerical Analysis*, 26(4):847–850, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/reprint/26/4/847>.

Anonymous:2021:JWB

- [110] Anonymous. John W. Barrett 29 June 1955, Wimbledon–30 June 2019, Wimbledon. *IMA Journal of Numerical Analysis*, 41(3):1639, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/1639/6309377>.

Anonymous:2023:CNS

- [111] Anonymous. Correction to: A novel spectral method for the semiclassical Schrödinger equation based on the Gaussian wave-packet transform. *IMA Journal of Numerical Analysis*, 43(6):3800, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3800/6958795>. See [1698].

Anselone:1987:DCA

- [112] P. M. Anselone and R. Ansonge. Discrete closure and asymptotic (quasi-)regularity in discretization algorithms. *IMA Journal of Numerical Analysis*, 7(4):431–448, 1987. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Antil:2023:AFH

- [113] Harbir Antil, Sören Bartels, and Armin Schikorra. Approximation of fractional harmonic maps. *IMA Journal of Numerical Analysis*, 43(3):1291–1323, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1291/6645339>.

Antil:2020:PCE

- [114] Harbir Antil, Thomas S. Brown, and Francisco-Javier Sayas. A problem in control of elastodynamics with piezoelectric effects. *IMA Journal of Numerical Analysis*, 40(4):2839–2870, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2839/5680742>.

Antil:2018:PEA

- [115] Harbir Antil and Enrique Otárola. An a posteriori error analysis for an optimal control problem involving the fractional Laplacian. *IMA Journal of Numerical Analysis*, 38(1):198–226, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/198/3062292>.

Antil:2018:SAW

- [116] Harbir Antil, Enrique Otárola, and Abner J. Salgado. Some applications of weighted norm inequalities to the error analysis of PDE-constrained optimization problems. *IMA Journal*

of Numerical Analysis, 38(2):852–883, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/852/3858067>.

Antil:2016:AEE

- [117] Harbir Antil and Abner J. Salgado. Approximation of elliptic equations with bmo coefficients. *IMA Journal of Numerical Analysis*, 36(1):222–237, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/222>.

Antolin:2019:PEU

- [118] Pablo Antolin, Annalisa Buffa, and Mathieu Fabre. A priori error for unilateral contact problems with Lagrange multipliers and isogeometric analysis. *IMA Journal of Numerical Analysis*, 39(4):1627–1651, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1627/5058940>.

Anton:2020:FDA

- [119] Rikard Anton, David Cohen, and Lluís Quer-Sardanyons. A fully discrete approximation of the one-dimensional stochastic heat equation. *IMA Journal of Numerical Analysis*, 40(1):247–284, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/247/5133711>.

Antonietti:2022:AEP

- [120] P. F. Antonietti, S. Berrone, A. Borio, A. D’Auria, M. Verani, and S. Weisser. Anisotropic *a posteriori* error estimate for the virtual element method. *IMA Journal of Numerical Analysis*, 42(2):1273–1312, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1273/6145109>.

Antonietti:2018:HOD

- [121] Paola F. Antonietti, Ilario Mazzieri, Niccolò Dal Santo, and Alfio Quarteroni. A high-order discontinuous Galerkin approximation to ordinary differential equations with applications to elastodynamics. *IMA Journal of Numerical Analysis*, 38(4):1709–1734, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1709/4581911>.

Antonietti:2023:VEM

- [122] Paola F. Antonietti, Giuseppe Vacca, and Marco Verani. Virtual element method for the Navier–Stokes equation coupled with the heat equation. *IMA Journal of Numerical Analysis*, 43(6):3396–3429, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3396/6832264>.

Antonopoulos:2017:GFE

- [123] D. C. Antonopoulos and V. A. Dougalis. Galerkin-finite element methods for the shallow water equations

with characteristic boundary conditions. *IMA Journal of Numerical Analysis*, 37(1):266–295, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/266/2669960/Galerkin-finite-element-methods-for-the-shallow>.

Antonopoulos:2020:SGM

- [124] D. C. Antonopoulos, V. A. Dougalis, and G. Kounadis. On the standard Galerkin method with explicit RK4 time stepping for the shallow water equations. *IMA Journal of Numerical Analysis*, 40(4):2415–2449, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2415/5549725>.

Antonopoulou:2020:STD

- [125] Dimitra C. Antonopoulou. Space-time discontinuous Galerkin methods for the ϵ -dependent stochastic Allen–Cahn equation with mild noise. *IMA Journal of Numerical Analysis*, 40(3):2076–2105, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/2076/5429543>.

Antonopoulou:2024:EPE

- [126] Dimitra C. Antonopoulou, Bernard Egwu, and Yubin Yan. *A posteriori* error analysis of space-time discontinuous Galerkin methods for the ϵ -stochastic Allen–Cahn equation. *IMA Journal of Numerical Analysis*, 44(3):1862–1902, May 2024. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/44/3/1862/7234090>.

Apel:2022:NPR

- [127] Thomas Apel, Volker Kempf, Alexander Linke, and Christian Merdon. A nonconforming pressure-robust finite element method for the Stokes equations on anisotropic meshes. *IMA Journal of Numerical Analysis*, 42(1):392–416, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/42/1/392/6065723>.

Apel:2001:NCF

- [128] Thomas Apel, Serge Nicaise, and Joachim Schöberl. A non-conforming finite element method with anisotropic mesh grading for the Stokes problem in domains with edges. *IMA Journal of Numerical Analysis*, 21(4):843–856, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210843.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210843.pdf.

Apel:2005:CTI

- [129] Thomas Apel and Cornelia Pester. Clement-type interpolation on spherical domains—interpolation error estimates and application to a posteriori error estimation. *IMA Journal of Numerical Analysis*, 25(2):310–336, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/310>;

<http://imanum.oupjournals.org/cgi/reprint/25/2/310>.

Apel:2020:MNE

- [130] Thomas Apel, Sergejs Rogovs, Johannes Pfefferer, and Max Winkler. Maximum norm error estimates for Neumann boundary value problems on graded meshes. *IMA Journal of Numerical Analysis*, 40(1):474–497, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/40/1/474/5239883>.

Apel:2018:EEP

- [131] Thomas Apel, Max Winkler, and Johannes Pfefferer. Error estimates for the postprocessing approach applied to Neumann boundary control problems in polyhedral domains. *IMA Journal of Numerical Analysis*, 38(4):1984–2025, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/38/4/1984/4389275>.

Araujo:2015:SFD

- [132] Adérito Araújo, Sílvia Barbeiro, and Pedro Serranho. Stability of finite difference schemes for nonlinear complex reaction-diffusion processes. *IMA Journal of Numerical Analysis*, 35(3):1381–1401, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imagna.oxfordjournals.org/content/35/3/1381>.

Araya:2011:FEA

- [133] Rodolfo Araya, Gabriel R. Barrenechea, Fabrice Jaillet, and Rodolfo

Rodríguez. Finite-element analysis of a static fluid–solid interaction problem. *IMA Journal of Numerical Analysis*, 31(3):886–913, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/886.full.pdf+html>.

Araya:2007:SFE

- [134] Rodolfo Araya, Gabriel R. Barrenechea, and Frédéric Valentin. A stabilized finite-element method for the Stokes problem including element and edge residuals. *IMA Journal of Numerical Analysis*, 27(1):172–197, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/172>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/172>.

Araya:2016:LOL

- [135] Rodolfo Araya, Abner H. Poza, and Frédéric Valentin. A low-order local projection method for the incompressible Navier–Stokes equations in two- and three-dimensions. *IMA Journal of Numerical Analysis*, 36(1):267–295, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/267>.

Araya:2021:MPE

- [136] Rodolfo Araya, Ramiro Rebolledo, and Frédéric Valentin. On a multiscale a posteriori error estimator for the Stokes and Brinkman equations. *IMA Journal of Numerical Analysis*, 41(1):344–

380, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/344/5661655>.

Araya:2020:NAT

- [137] Rodolfo Araya, Rodolfo Rodríguez, and Pablo Venegas. Numerical analysis of a time domain elastoacoustic problem. *IMA Journal of Numerical Analysis*, 40(2):1122–1153, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1122/5289476>.

Araya:2019:AAH

- [138] Rodolfo Araya, Manuel Solano, and Patrick Vega. Analysis of an adaptive HDG method for the Brinkman problem. *IMA Journal of Numerical Analysis*, 39(3):1502–1528, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1502/5032331>.

Arbenz:1982:CFE

- [139] P. Arbenz. Computable finite element error bounds for Poisson’s equation. *IMA Journal of Numerical Analysis*, 2(4):475–479, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Arbogast:2014:PEE

- [140] T. Arbogast, D. Estep, B. Sheehan, and S. Tavener. A posteriori error estimates for mixed finite element and finite volume methods for problems coupled through a boundary with nonmatching grids. *IMA Journal of*

Numerical Analysis, 34(4):1625–1653, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1625>.

Arbogast:2022:SAT

- [141] Todd Arbogast and Chieh-Sen Huang. A self-adaptive theta scheme using discontinuity aware quadrature for solving conservation laws. *IMA Journal of Numerical Analysis*, 42(4):3430–3463, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3430/6403484>.

Ardenghi:2009:SGM

- [142] J. I. Ardenghi, T. I. Gibelli, and M. C. Maciel. The spectral gradient method for unconstrained optimal control problems. *IMA Journal of Numerical Analysis*, 29(2):315–331, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/315>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/315>.

Arendt:2022:GAL

- [143] W. Arendt, I. Chalendar, and R. Eyraud. Galerkin approximation of linear problems in Banach and Hilbert spaces. *IMA Journal of Numerical Analysis*, 42(1):165–198, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/165/5916502>.

Arendt:2025:STE

- [144] W. Arendt, I. Chalendar, and R. Eyraud. Space-time error estimates for approximations of linear parabolic problems with generalized time boundary conditions. *IMA Journal of Numerical Analysis*, 45(2):1173–1225, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/1173/7685862>.

Argyros:1998:NNM

- [145] Ioannis K. Argyros. On a new Newton-Mysovskii-type theorem with applications to inexact Newton-like methods and their discretizations. *IMA Journal of Numerical Analysis*, 18(1):37–56, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180037.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180037.pdf.

Arioli:2018:FEM

- [146] Mario Arioli and Michele Benzi. A finite element method for quantum graphs. *IMA Journal of Numerical Analysis*, 38(3):1119–1163, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1119/3883929>.

Arioli:2013:DFS

- [147] Mario Arioli, Drosos Kourounis, and Daniel Loghin. Discrete fractional Sobolev norms for domain decomposition preconditioning. *IMA Jour-*

nal of Numerical Analysis, 33(1):318–342, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/318.full.pdf+html>.

Arioli:1992:SCC

- [148] Mario Arioli and Francesco Romani. Stability, convergence, and conditioning of stationary iterative methods of the form $x^{(i+1)} = Px^{(i)} + q$ for the solution of linear systems. *IMA Journal of Numerical Analysis*, 12(1):21–30, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Aristotelous:2015:ASO

- [149] Andreas C. Aristotelous, Ohannes A. Karakashian, and Steven M. Wise. Adaptive, second-order in time, primitive-variable discontinuous Galerkin schemes for a Cahn–Hilliard equation with a mass source. *IMA Journal of Numerical Analysis*, 35(3):1167–1198, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1167>.

Arnal:2008:NAM

- [150] Josep Arnal, Violeta Migallón, José Penadés, and Daniel B. Szyld. Newton additive and multiplicative Schwarz iterative methods. *IMA Journal of Numerical Analysis*, 28(1):143–161, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/143>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/143>.

Asaturyan:2001:LSP

- [151] Souren Asaturyan, Paolo Costantini, and Carla Manni. Local shape-preserving interpolation by space curves. *IMA Journal of Numerical Analysis*, 21(1):301–325, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210301.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210301.pdf.

Asharabi:2016:TDC

- [152] R. M. Asharabi and J. Prestin. On two-dimensional classical and Hermite sampling. *IMA Journal of Numerical Analysis*, 36(2):851–871, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/851>.

Asheim:2013:CGQ

- [153] Andreas Asheim and Daan Huybrechs. Complex Gaussian quadrature for oscillatory integral transforms. *IMA Journal of Numerical Analysis*, 33(4):1322–1341, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1322.full.pdf+html>.

Ashton:2025:CDL

- [154] Anthony Ashton. Cauchy data for Levin’s method. *IMA Journal of Numerical Analysis*, 45(1):87–125, January 2025. CODEN IJNADH. ISSN

0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/87/7587506>.

Asl:2021:ALM

- [155] Azam Asl and Michael L. Overton. Analysis of limited-memory BFGS on a class of nonsmooth convex functions. *IMA Journal of Numerical Analysis*, 41(1):1–27, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/1/5706038>.

Aston:1996:NMS

- [156] Philip J. Aston and A. Ganesh Sittampalam. Numerical methods for steady-state mode interactions. *IMA Journal of Numerical Analysis*, 16(3):435–456, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160435.sgm.abs.html.

Atkinson:1984:NSL

- [157] K. Atkinson and F. de Hoog. The numerical solution of Laplace’s equation on a wedge. *IMA Journal of Numerical Analysis*, 4(1):19–41, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Atkinson:1993:DCM

- [158] K. Atkinson and J. Flores. The discrete collocation method for nonlinear integral equations. *IMA Journal of Numerical Analysis*, 13(2):195–213, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Atkinson:1985:NEP

- [159] K. E. Atkinson. The numerical evaluation of particular solutions for Poisson’s equation. *IMA Journal of Numerical Analysis*, 5(3):319–338, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Atkinson:1989:DGM

- [160] K. E. Atkinson and F. A. Potra. On the discrete Galerkin method for Fredholm integral equations of the second kind. *IMA Journal of Numerical Analysis*, 9(3):385–403, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Atkinson:2000:PRE

- [161] Kendall Atkinson. The planar radiosity equation and its numerical solution. *IMA Journal of Numerical Analysis*, 20(2):303–332, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200303.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200303.pdf.

Atkinson:1994:NSN

- [162] Kendall E. Atkinson. The numerical solution of a non-linear boundary integral equation on smooth surfaces. *IMA Journal of Numerical Analysis*, 14(4):461–483, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Austin:2017:NSS

- [163] Anthony P. Austin and Kuan Xu. On the numerical stability of the second barycentric formula for trigono-

metric interpolation in shifted equispaced points. *IMA Journal of Numerical Analysis*, 37(3):1355–1374, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1355/2670026/On-the-numerical-stability-of-the-second>.

Awanou:2015:SFE

- [164] Gerard Awanou. Standard finite elements for the numerical resolution of the elliptic Monge–Ampère equation: classical solutions. *IMA Journal of Numerical Analysis*, 35(3):1150–1166, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1150>.

Axelsson:1981:SEE

- [165] O. Axelsson. Stability and error estimates of Galerkin finite element approximations for convection-diffusion equations. *IMA Journal of Numerical Analysis*, 1(3):329–345, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Axelsson:1997:MPP

- [166] O. Axelsson, Yu. R. Hakopian, and Yu. A. Kuznetsov. Multilevel preconditioning for perturbed finite element matrices. *IMA Journal of Numerical Analysis*, 17(1):125–149, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170125.sgm.abs.html.

Ayuso:2007:IAM

- [167] Blanca Ayuso, Javier de Frutos, and Julia Novo. Improving the accuracy of the mini-element approximation to Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 27(1):198–218, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/198>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/198>.

Azaiez:2008:MSE

- [168] M. Azaiez, F. Ben Belgacem, C. Bernardi, and M. El Rhabi. The mortar spectral element method in domains of operators. Part II: the curl operator and the vector potential problem. *IMA Journal of Numerical Analysis*, 28(1):106–120, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/106>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/106>.

Azaiez:2006:MSE

- [169] M. Azaiez, F. Ben Belgacem, and C. Bernardi. The mortar spectral element method in domains of operators. Part I: The divergence operator and Darcy’s equations. *IMA Journal of Numerical Analysis*, 26(1):131–154, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/131>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/131>.

Azmi:2022:CMI

- [170] Behzad Azmi and Karl Kunisch. On the convergence and mesh-independent property of the Barzilai–Borwein method for PDE-constrained optimization. *IMA Journal of Numerical Analysis*, 42(4):2984–3021, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/2984/6340562>.

Aznaran:2025:FEM

- [171] Francis R A Aznaran, Patrick E Farrell, Charles W Monroe, and Alexander J Van-Brunst. Finite element methods for multicomponent convection–diffusion. *IMA Journal of Numerical Analysis*, 45(1):188–222, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/188/7657984>.

Baart:1982:UAC

- [172] M. L. Baart. The use of autocorrelation for pseudorank determination in noisy ill-conditioned linear least-squares problems. *IMA Journal of Numerical Analysis*, 2(2):241–247, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Baart:1986:QTT

- [173] M. L. Baart and R. J. Y. McLeod. Quadratic transformations of triangular finite elements in two dimensions. *IMA Journal of Numerical Analysis*, 6(4):475–487, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Babolian:1981:FGS

- [174] E. Babolian and L. M. Delves. A fast Galerkin scheme for linear integro-differential equations. *IMA Journal of Numerical Analysis*, 1(2):193–213, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bachmayr:2018:PPS

- [175] Markus Bachmayr, Albert Cohen, and Wolfgang Dahmen. Parametric PDEs: sparse or low-rank approximations? *IMA Journal of Numerical Analysis*, 38(4):1661–1708, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1661/4159528>.

Bachmayr:2023:MRI

- [176] Markus Bachmayr and Ana Djurdjevac. Multilevel representations of isotropic Gaussian random fields on the sphere. *IMA Journal of Numerical Analysis*, 43(4):1970–2000, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/1970/6671229>.

Badea:2004:SNM

- [177] Lori Badea. On the Schwarz-Neumann method with an arbitrary number of domains. *IMA Journal of Numerical Analysis*, 24(2):215–238, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240215.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240215.pdf.

Badea:2014:GCR

- [178] Lori Badea. Global convergence rate of a standard multigrid method for variational inequalities. *IMA Journal of Numerical Analysis*, 34(1):197–216, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/197.full.pdf+html>.

Badia:2014:EAD

- [179] S. Badia, R. Codina, T. Gudi, and J. Guzmán. Error analysis of discontinuous Galerkin methods for the Stokes problem under minimal regularity. *IMA Journal of Numerical Analysis*, 34(2):800–819, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/800.full.pdf+html>.

Badia:2014:CTW

- [180] Santiago Badia and Juan Vicente Gutiérrez-Santacreu. Convergence towards weak solutions of the Navier–Stokes equations for a finite element approximation with numerical subgrid-scale modelling. *IMA Journal of Numerical Analysis*, 34(3):1193–1221, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1193>.

Bai:2023:CLR

- [181] Genming Bai, Buyang Li, and Yifei Wu. A constructive low-regularity integrator for the one-dimensional cubic nonlinear Schrödinger equation under

Neumann boundary condition. *IMA Journal of Numerical Analysis*, 43(6):3243–3281, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3243/6881699>.

Bai:2018:WMS

- [182] Jiejing Bai, Chun Li, and Xiao-Yan Liu. Weak multi-symplectic reformulation and geometric numerical integration for the nonlinear Schrödinger equations with delta potentials. *IMA Journal of Numerical Analysis*, 38(1):399–429, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/399/3070515>.

Bai:2003:RPC

- [183] Journal Zhong-Zhi Bai and Gui-Qing Li. Restrictively preconditioned conjugate gradient methods for systems of linear equations. *IMA Journal of Numerical Analysis*, 23(4):561–580, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230561.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230561.pdf.

Bai:1994:NBG

- [184] Zhaojun Bai, D. Hu, and L. Reichel. A Newton basis GMRES implementation. *IMA Journal of Numerical Analysis*, 14(4):563–581, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bai:1998:MCM

- [185] Zhong-Zhi Bai. On the monotone convergence of matrix multisplitting relaxation methods for the linear complementarity problem. *IMA Journal of Numerical Analysis*, 18(4):509–518, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180509.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180509.pdf.

Bai:2019:RHI

- [186] Zhong-Zhi Bai. Regularized HSS iteration methods for stabilized saddle-point problems. *IMA Journal of Numerical Analysis*, 39(4):1888–1923, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1888/5062724>.

Bai:2013:PMI

- [187] Zhong-Zhi Bai, Michele Benzi, Fang Chen, and Zeng-Qi Wang. Preconditioned MHSS iteration methods for a class of block two-by-two linear systems with applications to distributed control problems. *IMA Journal of Numerical Analysis*, 33(1):343–369, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/343.full.pdf+html>.

Bai:2007:AHS

- [188] Zhong-Zhi Bai and Gene H. Golub. Accelerated Hermitian and skew-Hermitian splitting iteration meth-

ods for saddle-point problems. *IMA Journal of Numerical Analysis*, 27(1):1–23, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/1>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/1>.

Baker:2008:ITR

- [189] C. G. Baker, P.-A. Absil, and K. A. Gallivan. An implicit trust-region method on Riemannian manifolds. *IMA Journal of Numerical Analysis*, 28(4):665–689, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/665>.

Baker:1993:CSQ

- [190] C. T. H. Baker and M. S. Derakhshan. Convergence and stability of quadrature methods applied to Volterra equations with delay. *IMA Journal of Numerical Analysis*, 13(1):67–91, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Baker:1991:SAB

- [191] Christopher T. H. Baker and Neville J. Ford. Some applications of the boundary-locus method and the method of D -partitions. *IMA Journal of Numerical Analysis*, 11(2):143–158, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Baker:1994:CSR

- [192] Christopher T. H. Baker and Christopher A. H. Paul. Computing stability regions — Runge–Kutta meth-

ods for delay differential equations. *IMA Journal of Numerical Analysis*, 14(3):347–362, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Baker:2022:NAW

- [193] Katherine Baker and Lehel Banjai. Numerical analysis of a wave equation for lossy media obeying a frequency power law. *IMA Journal of Numerical Analysis*, 42(3):2083–2117, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2083/6272089>.

Baker:1999:SCS

- [194] M. D. Baker, E. Süli, and A. F. Ware. Stability and convergence of the spectral Lagrange–Galerkin method for mixed periodic/non-periodic convection-dominated diffusion problems. *IMA Journal of Numerical Analysis*, 19(4):637–663, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190637.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190637.pdf.

Bakhvalov:2024:LSS

- [195] Pavel Bakhvalov and Mikhail Surnachev. Linear schemes with several degrees of freedom for the transport equation and the long-time simulation accuracy. *IMA Journal of Numerical Analysis*, 44(1):297–396, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL

<http://academic.oup.com/imajna/article/44/1/297/7074504>.

Bakke:1992:SAM

- [196] V. L. Bakke and Z. Jackiewicz. Stability analysis of multilag and modified multilag methods for Volterra integrodifferential equations. *IMA Journal of Numerical Analysis*, 12(2):243–257, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Balci:2025:EAC

- [197] Anna Kh Balci and Alex Kaltenbach. Error analysis for a Crouzeix–Raviart approximation of the variable exponent Dirichlet problem. *IMA Journal of Numerical Analysis*, 45(2):1102–1142, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/1102/7687813>.

Ball:1983:IBP

- [198] A. A. Ball. The improved bicubic patch—natural surface counterpart of the parametric cubic segment. *IMA Journal of Numerical Analysis*, 3(3):373–379, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Banas:2014:CFE

- [199] Lřbomřr Bařas, Zdzisław Brzeźniak, Mikhail Neklyudov, and Andreas Prohl. A convergent finite-element-based discretization of the stochastic Landau–Lifshitz–Gilbert equation. *IMA Journal of Numerical Analysis*, 34(2):502–549, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (elec-

tronic). URL <http://imajna.oxfordjournals.org/content/34/2/502.full.pdf+html>.

Banas:2024:NAS

- [200] Lubomír Bañas, Benjamin Gess, and Christian Vieth. Numerical approximation of singular-degenerate parabolic stochastic partial differential equations. *IMA Journal of Numerical Analysis*, 44(4):2090–2137, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2090/7246243>.

Banas:2021:NAN

- [201] Lubomír Banas, Robert Lasarzik, and Andreas Prohl. Numerical analysis for nematic electrolytes. *IMA Journal of Numerical Analysis*, 41(3):2186–2254, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/2186/6030375>.

Banas:2014:DUC

- [202] Lubomír Banas, Marcus Page, Dirk Praetorius, and Jonathan Rochat. A decoupled and unconditionally convergent linear FEM integrator for the Landau–Lifshitz–Gilbert equation with magnetostriction. *IMA Journal of Numerical Analysis*, 34(4):1361–1385, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1361>.

Banjai:2014:TDD

- [203] Lehel Banjai. Time-domain Dirichlet-to-Neumann map and its discretiza-

tion. *IMA Journal of Numerical Analysis*, 34(3):1136–1155, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1136>.

Banjai:2008:HMT

- [204] Lehel Banjai and Wolfgang Hackbusch. Hierarchical matrix techniques for low- and high-frequency Helmholtz problems. *IMA Journal of Numerical Analysis*, 28(1):46–79, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/46>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/46>.

Banjai:2015:FDK

- [205] Lehel Banjai, Antonio R. Laliena, and Francisco-Javier Sayas. Fully discrete Kirchhoff formulas with CQ-BEM. *IMA Journal of Numerical Analysis*, 35(2):859–884, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/859.2>.

Banjai:2019:RKC

- [206] Lehel Banjai and Christian Lubich. Runge–Kutta convolution coercivity and its use for time-dependent boundary integral equations. *IMA Journal of Numerical Analysis*, 39(3):1134–1157, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/39/3/1134>.

academic.oup.com/imajna/article/39/3/1134/5032994.

Banjai:2022:TDA

- [207] Lehel Banjai, Christian Lubich, and Jörg Nick. Time-dependent acoustic scattering from generalized impedance boundary conditions via boundary elements and convolution quadrature. *IMA Journal of Numerical Analysis*, 42(1):1–26, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/1/6064175>.

Banjai:2023:EHF

- [208] Lehel Banjai, Jens M. Melenk, and Christoph Schwab. *hp*-FEM for reaction-diffusion equations. II: robust exponential convergence for multiple length scales in corner domains. *IMA Journal of Numerical Analysis*, 43(6):3282–3325, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3282/6873557>.

Banjai:2012:PMM

- [209] Lehel Banjai and Daniel Peterseim. Parallel multistep methods for linear evolution problems. *IMA Journal of Numerical Analysis*, 32(3):1217–1240, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1217.full.pdf+html>.

Bansal:2021:STD

- [210] Pratyuksh Bansal, Andrea Moiola, Ilaria Perugia, and Christoph Schwab.

Space-time discontinuous Galerkin approximation of acoustic waves with point singularities. *IMA Journal of Numerical Analysis*, 41(3):2056–2109, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/2056/6015840>.

Bansch:2019:PET

- [211] Eberhard Bänsch and Andreas Brenner. A posteriori estimates for the two-step backward differentiation formula and discrete regularity for the time-dependent Stokes equations. *IMA Journal of Numerical Analysis*, 39(2):713–759, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/713/4961331>.

Bansch:2020:MFE

- [212] Eberhard Bänsch and Markus Gahn. A mixed finite-element method for elliptic operators with Wentzell boundary condition. *IMA Journal of Numerical Analysis*, 40(1):87–108, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/87/5123806>.

Bao:2024:MSA

- [213] Jianhai Bao, Christoph Reisinger, Panpan Ren, and Wolfgang Stockinger. Milstein schemes and antithetic multilevel Monte Carlo sampling for delay McKean–Vlasov equations and interacting particle systems. *IMA Journal of Numerical Analysis*, 44(4):2437–2479, July 2024. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2437/7258846>.

Bao:2003:EBF

- [214] Weizhu Bao. Error bounds for the finite-element approximation of the exterior Stokes equations in two dimensions. *IMA Journal of Numerical Analysis*, 23(1):125–148, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230125.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230125.pdf.

Bao:2024:IUE

- [215] Weizhu Bao, Yongyong Cai, and Yue Feng. Improved uniform error bounds on time-splitting methods for the long-time dynamics of the weakly nonlinear Dirac equation. *IMA Journal of Numerical Analysis*, 44(2):654–679, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/654/7175097>.

Barbeiro:2005:SFD

- [216] S. Barbeiro, J. A. Ferreira, and R. D. Grigorieff. Supraconvergence of a finite difference scheme for solutions in $H^s(0, L)$. *IMA Journal of Numerical Analysis*, 25(4):797–811, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://oxfordjournals.org/cgi/reprint/25/4/797>.

Barboteu:2002:NAB

- [217] Mik ael Barboteu, Weimin Han, and Mircea Sofonea. Numerical analysis of a bilateral frictional contact problem for linearly elastic materials. *IMA Journal of Numerical Analysis*, 22(3):407–436, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220407.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220407.pdf.

Barnhill:1981:CFE

- [218] R. E. Barnhill, J. H. Brown, and A. R. Mitchell. A comparison of finite element error bounds for Poisson’s equation. *IMA Journal of Numerical Analysis*, 1(1):95–103, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrenechea:2024:CIP

- [219] Gabriel R. Barrenechea, Erik Burman, Ernesto C aceres, and Johnny Guzm an. Continuous interior penalty stabilization for divergence-free finite element methods. *IMA Journal of Numerical Analysis*, 44(2):980–1002, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/980/7179402>.

Barrenechea:2019:TDS

- [220] Gabriel R. Barrenechea, Ernesto Castillo, and Ramon Codina. Time-dependent semidiscrete analysis of the viscoelastic fluid flow problem using a variational multiscale stabilized formulation. *IMA Journal of Numerical Analysis*, 39(2):792–819, April 2019.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/792/4964962>.

Barrenechea:2024:NBP

- [221] Gabriel R. Barrenechea, Emmanuel H. Georgoulis, Tristan Pryer, and Andreas Veiser. A nodally bound-preserving finite element method. *IMA Journal of Numerical Analysis*, 44(4):2198–2219, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2198/7250438>.

Barrenechea:2015:SAR

- [222] Gabriel R. Barrenechea, Volker John, and Petr Knobloch. Some analytical results for an algebraic flux correction scheme for a steady convection-diffusion equation in one dimension. *IMA Journal of Numerical Analysis*, 35(4):1729–1756, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1729>.

Barrenechea:2020:ISS

- [223] Gabriel R. Barrenechea and Andreas Wachtel. The inf-sup stability of the lowest order Taylor–Hood pair on affine anisotropic meshes. *IMA Journal of Numerical Analysis*, 40(4):2377–2398, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2377/5526934>.

Barrett:1988:ORFb

- [224] J. W. Barrett, G. Moore, and K. W. Morton. Optimal recovery in the finite-element method. I. Recovery from weighted L^2 fits. *IMA Journal of Numerical Analysis*, 8(2):149–184, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrett:1988:ORFa

- [225] J. W. Barrett, G. Moore, and K. W. Morton. Optimal recovery in the finite-element method. II. Defect correction for ordinary differential equations. *IMA Journal of Numerical Analysis*, 8(4):527–540, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrett:1981:OPG

- [226] J. W. Barrett and K. W. Morton. Optimal Petrov–Galerkin methods through approximate symmetrization. *IMA Journal of Numerical Analysis*, 1(4):439–468, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrett:2004:CFE

- [227] J. W. Barrett and R. Nürnberg. Convergence of a finite-element approximation of surfactant spreading on a thin film in the presence of van der Waals forces. *IMA Journal of Numerical Analysis*, 24(2):323–363, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240323.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240323.pdf.

Barrett:1996:EBF

- [228] John W. Barrett and James F. Blowey. An error bound for the finite element approximation of a model for phase separation of a multi-component alloy. *IMA Journal of Numerical Analysis*, 16(2):257–287, April 1996. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160257.sgm.abs.html.

Barrett:1998:FEA

- [229] John W. Barrett and James F. Blowey. Finite element approximation of a model for phase separation of a multi-component alloy with a concentration-dependent mobility matrix. *IMA Journal of Numerical Analysis*, 18(2):287–328, April 1998. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180287.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180287.pdf.

Barrett:1999:IEB

- [230] John W. Barrett and James F. Blowey. An improved error bound for a finite element approximation of a model for phase separation of a multi-component alloy. *IMA Journal of Numerical Analysis*, 19(1):147–168, January 1999. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190147.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190147.pdf.

Barrett:2002:FEA

- [231] John W. Barrett and James F. Blowey. Finite element approximation of an Allen–Cahn/Cahn–Hilliard system. *IMA Journal of Numerical Analysis*, 22(1):11–71, January 2002. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220011.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220011.pdf.

Barrett:2018:CFE

- [232] John W. Barrett and Sébastien Boyaval. Corrigendum to: Finite element approximation of the FENE-P model. *IMA Journal of Numerical Analysis*, 38(4):2166–2168, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2166/5052138>. See [233].

Barrett:2018:FEA

- [233] John W. Barrett and Sébastien Boyaval. Finite element approximation of the FENE-P model. *IMA Journal of Numerical Analysis*, 38(4):1599–1660, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1599/4561632>. See corrigendum [232].

Barrett:1991:FEA

- [234] John W. Barrett, Roma Chakrabarti, and Charles M. Elliott. Finite element approximation of a rigid punch indenting a membrane. *IMA Journal*

of *Numerical Analysis*, 11(4):579–594, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrett:2021:FEE

- [235] John W. Barrett, Klaus Deckelnick, and Robert Nürnberg. A finite element error analysis for axisymmetric mean curvature flow. *IMA Journal of Numerical Analysis*, 41(3):1641–1667, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/41/3/1641/5865040>.

Barrett:2021:PPF

- [236] John W. Barrett, Klaus Deckelnick, and Vanessa Styles. A practical phase field method for an elliptic surface PDE. *IMA Journal of Numerical Analysis*, 41(3):1668–1695, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/41/3/1668/5893597>.

Barrett:1984:FEM

- [237] John W. Barrett and Charles M. Elliott. A finite-element method for solving elliptic equations with Neumann data on a curved boundary using unfitted meshes. *IMA Journal of Numerical Analysis*, 4(3):309–325, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrett:1986:TFE

- [238] John W. Barrett and Charles M. Elliott. Total flux estimates for a finite-element approximation of parabolic equations. *IMA Journal of Numerical Analysis*, 6(3):253–264, 1986. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrett:1987:FUF

- [239] John W. Barrett and Charles M. Elliott. Fitted and unfitted finite-element methods for elliptic equations with smooth interfaces. *IMA Journal of Numerical Analysis*, 7(3):283–300, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrett:1987:TFE

- [240] John W. Barrett and Charles M. Elliott. Total flux estimates for a finite-element approximation of elliptic equations. *IMA Journal of Numerical Analysis*, 7(2):129–148, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrett:1988:FEA

- [241] John W. Barrett and Charles M. Elliott. Finite-element approximation of elliptic equations with a Neumann or Robin condition on a curved boundary. *IMA Journal of Numerical Analysis*, 8(3):321–342, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrett:1989:FEA

- [242] John W. Barrett and Charles M. Elliott. Finite-element approximation of a plasma equilibrium problem. *IMA Journal of Numerical Analysis*, 9(4):443–464, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrett:2008:NAA

- [243] John W. Barrett, Harald Garcke, and Robert Nürnberg. Numerical approxi-

mation of anisotropic geometric evolution equations in the plane. *IMA Journal of Numerical Analysis*, 28(2):292–330, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/292>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/292>.

Barrett:2010:NAG

- [244] John W. Barrett, Harald Garcke, and Robert Nürnberg. Numerical approximation of gradient flows for closed curves in d . *IMA Journal of Numerical Analysis*, 30(1):4–60, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/4>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/4>.

Barrett:2014:SPF

- [245] John W. Barrett, Harald Garcke, and Robert Nürnberg. Stable phase field approximations of anisotropic solidification. *IMA Journal of Numerical Analysis*, 34(4):1289–1327, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1289>.

Barrett:2017:SVA

- [246] John W. Barrett, Harald Garcke, and Robert Nürnberg. Stable variational approximations of boundary value problems for Willmore flow with Gaussian curvature. *IMA Journal*

of Numerical Analysis, 37(4):1657–1709, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1657/3063839>.

Barrett:2020:NAC

- [247] John W. Barrett, Harald Garcke, and Robert Nürnberg. Numerical approximation of curve evolutions in Riemannian manifolds. *IMA Journal of Numerical Analysis*, 40(3):1601–1651, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1601/5368988>.

Barrett:2015:SSN

- [248] John W. Barrett and Leonid Prigozhin. Sandpiles and superconductors: non-conforming linear finite element approximations for mixed formulations of quasi-variational inequalities. *IMA Journal of Numerical Analysis*, 35(1):1–38, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/1>.

Barrett:2009:NAC

- [249] John W. Barrett and Endre Süli. Numerical approximation of corotational dumbbell models for dilute polymers. *IMA Journal of Numerical Analysis*, 29(4):937–959, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/937>; <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/937>.

oxfordjournals.org/cgi/reprint/
29/4/937.

Barrios:2010:PPE

- [250] Tomás P. Barrios and Rommel Bustinza. A priori and a posteriori error analyses of an augmented discontinuous Galerkin formulation. *IMA Journal of Numerical Analysis*, 30(4):987–1008, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/987.full.pdf+html>.

Bartels:2013:SSA

- [251] Sören Bartels. A simple scheme for the approximation of the elastic flow of inextensible curves. *IMA Journal of Numerical Analysis*, 33(4):1115–1125, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1115.full.pdf+html>.

Bartels:2016:BSS

- [252] Sören Bartels. Broken Sobolev space iteration for total variation regularized minimization problems. *IMA Journal of Numerical Analysis*, 36(2):493–502, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/493>.

Bartels:2016:SSA

- [253] Sören Bartels. A simple scheme for the approximation of elastic vibrations of inextensible curves. *IMA Journal of Numerical Analysis*, 36(3):1051–1071, July 2016. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1051>.

Bartels:2021:SCE

- [254] Sören Bartels. Simulation of constrained elastic curves and application to a conical sheet indentation problem. *IMA Journal of Numerical Analysis*, 41(3):2255–2279, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/2255/6148813>.

Bartels:2024:EEL

- [255] Sören Bartels, Andrea Bonito, and Philipp Tscherner. Error estimates for a linear folding model. *IMA Journal of Numerical Analysis*, 44(1):1–23, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/1/7057974>.

Bartels:2024:EAN

- [256] Sören Bartels, Balázs Kovács, and Zhangxian Wang. Error analysis for the numerical approximation of the harmonic map heat flow with nodal constraints. *IMA Journal of Numerical Analysis*, 44(2):633–653, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/633/7192243>.

Bartels:2022:SGF

- [257] Sören Bartels and Christian Palus. Stable gradient flow discretizations for simulating bilayer plate bending with isometry and obstacle constraints. *IMA*

Journal of Numerical Analysis, 42(3):1903–1928, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/1903/6318669>.

Bartels:2018:SSA

- [258] Sören Bartels, Philipp Reiter, and Johannes Riege. A simple scheme for the approximation of self-avoiding inextensible curves. *IMA Journal of Numerical Analysis*, 38(2):543–565, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/543/3829872>.

Bartholomew-Biggs:1988:GCV

- [259] M. C. Bartholomew-Biggs. A globally convergent version of REQP for constrained minimization. *IMA Journal of Numerical Analysis*, 8(2):253–271, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barucq:2021:SDW

- [260] H el ene Barucq, M’Barek Fares, Carola Kruse, and S ebastien Tordeux. Sparsified discrete wave problem involving a radiation condition on a prolate spheroidal surface. *IMA Journal of Numerical Analysis*, 41(1):315–343, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/315/5627734>.

Barzilai:1988:TPS

- [261] Jonathan Barzilai and Jonathan M. Borwein. Two-point step size gradient methods. *IMA Journal of Nu-*

merical Analysis, 8(1):141–148, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bauermeister:2010:FEA

- [262] Norbert Bauermeister and Simon Shaw. Finite-element approximation of non-Fickian polymer diffusion. *IMA Journal of Numerical Analysis*, 30(3):702–730, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/702>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/702>.

Bause:2005:OCR

- [263] Markus Bause. On optimal convergence rates for higher-order Navier–Stokes approximations. I. Error estimates for the spatial discretization. *IMA Journal of Numerical Analysis*, 25(4):812–841, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/812>.

Beatson:1997:FER

- [264] R. K. Beatson and W. A. Light. Fast evaluation of radial basis functions: methods for two-dimensional polyharmonic splines. *IMA Journal of Numerical Analysis*, 17(3):343–372, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170343.sgm.abs.html.

Beatson:1992:UIR

- [265] R. K. Beatson and M. J. D. Powell.

Univariate interpolation on a regular finite grid by a multiquadric plus a linear polynomial. *IMA Journal of Numerical Analysis*, 12(1):107–133, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Beatson:2007:FEP

- [266] R. K. Beatson, M. J. D. Powell, and A. M. Tan. Fast evaluation of polyharmonic splines in three dimensions. *IMA Journal of Numerical Analysis*, 27(3):427–450, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/427>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/427>.

Beatson:2014:PCS

- [267] R. K. Beatson, Wolfgang zu Castell, and Yuan Xu. A Pólya criterion for (strict) positive-definiteness on the sphere. *IMA Journal of Numerical Analysis*, 34(2):550–568, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/550.full.pdf+html>.

Behforooz:1981:ECI

- [268] G. H. Behforooz and N. Papamichael. End conditions for interpolatory quintic splines. *IMA Journal of Numerical Analysis*, 1(1):81–93, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Behie:1983:CFI

- [269] A. Behie and P. Forsyth, Jr. Comparison of fast iterative methods for

symmetric systems. *IMA Journal of Numerical Analysis*, 3(1):41–63, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Behringer:2023:FDB

- [270] Niklas Behringer, Boris Vexler, and Dmitriy Leykekhman. Fully discrete best-approximation-type estimates in $L^\infty(I; L^2(\Omega)^d)$ for finite element discretizations of the transient Stokes equations. *IMA Journal of Numerical Analysis*, 43(2):852–880, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/852/6573334>.

BeiraodaVeiga:2024:AVV

- [271] L. Beirão da Veiga, C. Canuto, R. H. Nochetto, G. Vacca, and M. Verani. Adaptive VEM for variable data: convergence and optimality. *IMA Journal of Numerical Analysis*, 44(5):2553–2602, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2553/7410312>.

daVeiga:2024:PRS

- [272] L. Beirão da Veiga, F. Dassi, and G. Vacca. Pressure robust SUPG-stabilized finite elements for the unsteady Navier–Stokes equation. *IMA Journal of Numerical Analysis*, 44(2):710–750, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/710/7151085>. See erratum [712].

daVeiga:2025:CSV

- [273] L Beirão da Veiga, C Lovadina, and M Trezzi. CIP-stabilized virtual elements for diffusion–convection–reaction problems. *IMA Journal of Numerical Analysis*, 45(2):934–970, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/934/7685736>.

Beiser:2023:ASS

- [274] Florian Beiser, Brendan Keith, Simon Urbainczyk, and Barbara Wohlmuth. Adaptive sampling strategies for risk-averse stochastic optimization with constraints. *IMA Journal of Numerical Analysis*, 43(6):3729–3765, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3729/6991354>.

Belenki:2012:OAF

- [275] Liudmila Belenki, Lars Diening, and Christian Kreuzer. Optimality of an adaptive finite element method for the p -Laplacian equation. *IMA Journal of Numerical Analysis*, 32(2):484–510, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/484.full.pdf+html>.

Belhachmi:2004:RPE

- [276] Z. Belhachmi. Residual a posteriori error estimates for a 3D mortar finite-element method: the Stokes system. *IMA Journal of Numerical Analysis*,

24(3):521–547, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240521.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240521.pdf.

Belhachmi:2006:FEA

- [277] Zakaria Belhachmi, Dorin Bucur, and Jean-Marc Sac-Epee. Finite element approximation of the Neumann eigenvalue problem in domains with multiple cracks. *IMA Journal of Numerical Analysis*, 26(4):790–810, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/790>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/790>.

Bellavia:2015:SLC

- [278] S. Bellavia and B. Morini. Strong local convergence properties of adaptive regularized methods for non-linear least squares. *IMA Journal of Numerical Analysis*, 35(2):947–968, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/947>.

Bellavia:2021:ACR

- [279] Stefania Bellavia, Gianmarco Gurioli, and Benedetta Morini. Adaptive cubic regularization methods with dynamic inexact Hessian information and applications to finite-sum minimization. *IMA Journal of Numerical Analysis*, 41(1):764–799, January 2021. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/41/1/764/5824083>.

Bellavia:2020:SIN

- [280] Stefania Bellavia, Natasa Krejić, and Natasa Krklec Jerinkić. Subsampled inexact Newton methods for minimizing large sums of convex functions. *IMA Journal of Numerical Analysis*, 40(4): 2309–2341, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/40/4/2309/5528032>.

Bellen:1990:SAR

- [281] A. Bellen, Z. Jackiewicz, R. Vermiglio, and M. Zennaro. Stability analysis of Runge–Kutta methods for Volterra integral equations of the second kind. *IMA Journal of Numerical Analysis*, 10(1):103–118, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bellen:2002:PSN

- [282] Alfredo Bellen. Preservation of superconvergence in the numerical integration of delay differential equations with proportional delay. *IMA Journal of Numerical Analysis*, 22(4): 529–536, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220529.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220529.pdf.

Bellettini:1996:NSM

- [283] G. Bellettini and M. Paolini. Numerical simulations of measurements

of capillary contact angles. *IMA Journal of Numerical Analysis*, 16(2): 165–178, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160165.sgm.abs.html.

Beltran:2011:ECN

- [284] Carlos Beltrán. Estimates on the condition number of random rank-deficient matrices. *IMA Journal of Numerical Analysis*, 31(1):25–39, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imagna.oxfordjournals.org/content/31/1/25.full.pdf+html>.

Beltran:2022:MVC

- [285] Carlos Beltrán and Fátima Lizarte. On the minimum value of the condition number of polynomials. *IMA Journal of Numerical Analysis*, 42(4): 2959–2983, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/42/4/2959/6374201>.

Beltran:2024:WCF

- [286] Carlos Beltrán, Vanni Noferini, and Nick Vannieuwenhoven. When can forward stable algorithms be composed stably? *IMA Journal of Numerical Analysis*, 44(2):886–919, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/44/2/886/7181045>.

Belward:1985:FSA

- [287] J. A. Belward. Further studies of the application of constrained mini-

mization methods to Fredholm integral equations of the first kind. *IMA Journal of Numerical Analysis*, 5(2):125–139, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ben-Artzi:2018:DFO

- [288] Matania Ben-Artzi, Jean-Pierre Croisille, Dalia Fishelov, and Ron Katzir. Discrete fourth-order Sturm–Liouville problems. *IMA Journal of Numerical Analysis*, 38(3):1485–1522, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1485/4084722>.

Ben-Artzi:2021:FDA

- [289] Matania Ben-Artzi and Benjamin Kramer. Finite difference approach to fourth-order linear boundary-value problems. *IMA Journal of Numerical Analysis*, 41(4):2530–2561, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2530/5900302>.

BenBelgacem:2012:UCB

- [290] Faker Ben Belgacem, Christine Bernardi, Adel Blouza, and Martin Vohralík. On the unilateral contact between membranes. Part 2: a posteriori analysis and numerical experiments. *IMA Journal of Numerical Analysis*, 32(3):1147–1172, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1147.full.pdf+html>.

Bendali:2014:LAR

- [291] Abderrahmane Bendali, Yassine Boubendir, and Nicolas Zerbib. Localized adaptive radiation condition for coupling boundary and finite element methods applied to wave propagation problems. *IMA Journal of Numerical Analysis*, 34(3):1240–1265, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1240>.

Benitez:2022:PPS

- [292] Marta Benítez and Bernardo Cockburn. Post-processing for spatial accuracy-enhancement of pure Lagrange–Galerkin schemes applied to convection-diffusion equations. *IMA Journal of Numerical Analysis*, 42(1):54–77, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/54/5924597>.

Benner:2022:LIE

- [293] Peter Benner, Tony Stillfjord, and Christoph Trautwein. A linear implicit Euler method for the finite element discretization of a controlled stochastic heat equation. *IMA Journal of Numerical Analysis*, 42(3):2118–2150, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2118/6278491>.

Benouahmane:2019:NMC

- [294] Brahim Benouahmane, Cuyt Annie, and Irem Yaman. Near-minimal cu-

bature formulae on the disk. *IMA Journal of Numerical Analysis*, 39(1): 297–314, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/297/4718074>.

Benzi:2008:BPR

- [295] Michele Benzi and Daniele Bertaccini. Block preconditioning of real-valued iterative algorithms for complex linear systems. *IMA Journal of Numerical Analysis*, 28(3):598–618, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/598>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/598>.

Bergold:2024:GWP

- [296] Paul Bergold and Caroline Lasser. The Gaussian wave packet transform via quadrature rules. *IMA Journal of Numerical Analysis*, 44(3):1785–1820, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1785/7232245>.

Bermejo:2010:SLG

- [297] R. Bermejo and J. Carpio. A semi-Lagrangian–Galerkin projection scheme for convection equations. *IMA Journal of Numerical Analysis*, 30(3): 799–831, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/799>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/799>.

imajna.oxfordjournals.org/cgi/reprint/30/3/799.

Bermejo:2025:HOL

- [298] Rodolfo Bermejo and Manuel Colera. High-order Lagrange–Galerkin methods for the conservative formulation of the advection–diffusion equation. *IMA Journal of Numerical Analysis*, 45(2):843–893, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/843/7675405>.

Bermudez:2006:ASA

- [299] A. Bermúdez, P. Gamallo, M. R. Nogueiras, and R. Rodríguez. Approximation of a structural acoustic vibration problem by hexahedral finite elements. *IMA Journal of Numerical Analysis*, 26(2):391–421, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/391>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/391>.

Bermudez:1991:SSW

- [300] A. Bermúdez, C. Rodríguez, and M. A. Vilar. Solving shallow water equations by a mixed implicit finite element method. *IMA Journal of Numerical Analysis*, 11(1):79–97, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bermudez:2012:NST

- [301] Alfredo Bermúdez, Bibiana López-Rodríguez, Rodolfo Rodríguez, and Pilar Salgado. Numerical solu-

tion of transient eddy current problems with input current intensities as boundary data. *IMA Journal of Numerical Analysis*, 32(3):1001–1029, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1001.full.pdf+html>.

Bermudez:2010:NAF

- [302] Alfredo Bermúdez, Carlos Reales, Rodolfo Rodríguez, and Pilar Salgado. Numerical analysis of a finite-element method for the axisymmetric eddy current model of an induction furnace. *IMA Journal of Numerical Analysis*, 30(3):654–676, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/654>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/654>.

BermudezdeCastroLopez:1982:MME

- [303] A. Bermúdez de Castro López. A mixed method for the elastoplastic torsion problem. *IMA Journal of Numerical Analysis*, 2(3):325–334, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bernardi:1990:SGS

- [304] Christine Bernardi, Claudio Canuto, Yvon Maday, and Brigitte Métivet. Single-grid spectral collocation for the Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 10(2):253–297, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bernardi:2014:PAS

- [305] Christine Bernardi, Linda El Alaoui, and Zoubida Mghazli. A posteriori analysis of a space and time discretization of a nonlinear model for the flow in partially saturated porous media. *IMA Journal of Numerical Analysis*, 34(3):1002–1036, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1002>.

Bernardi:2001:EIM

- [306] Christine Bernardi, Nicolas Fiétier, and Robert G. Owens. An error indicator for mortar element solutions to the Stokes problem. *IMA Journal of Numerical Analysis*, 21(4):857–886, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210857.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210857.pdf.

Bernardi:1992:MSE

- [307] Christine Bernardi, Vivette Girault, and Yvon Maday. Mixed spectral element approximation of the Navier–Stokes equations in the stream-function and vorticity formulation. *IMA Journal of Numerical Analysis*, 12(4):565–608, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bernardi:1987:MMT

- [308] Christine Bernardi, Edwige Godlewski, and Geneviève Raugel. A mixed method for the time-dependent Navier–Stokes problem. *IMA Journal of Nu-*

merical Analysis, 7(2):165–189, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bernardi:2013:PAF

- [309] Christine Bernardi, Frédéric Hecht, Hervé Le Dret, and Adel Blouza. A posteriori analysis of a finite element discretization of a Naghdi shell model. *IMA Journal of Numerical Analysis*, 33(1):190–211, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/190.full.pdf+html>.

Bernardi:2010:NFE

- [310] Christine Bernardi, Frédéric Hecht, and Fatma Zohra Nouri. A new finite-element discretization of the Stokes problem coupled with the Darcy equations. *IMA Journal of Numerical Analysis*, 30(1):61–93, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/61>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/61>.

Bernardi:2016:SDD

- [311] Christine Bernardi, Sarra Maarouf, and Driss Yakoubi. Spectral discretization of Darcy’s equations coupled with the heat equation. *IMA Journal of Numerical Analysis*, 36(3):1193–1216, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1193>.

Bernardi:2015:PEA

- [312] Christine Bernardi and Toni Sayah. A posteriori error analysis of the time-dependent Stokes equations with mixed boundary conditions. *IMA Journal of Numerical Analysis*, 35(1):179–198, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/179>.

Bernkopf:2023:SDH

- [313] Maximilian Bernkopf, Stefan Sauter, Céline Torres, and Alexander Veit. Solvability of discrete Helmholtz equations. *IMA Journal of Numerical Analysis*, 43(3):1802–1830, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1802/6653070>.

Berrone:2008:TSP

- [314] Stefano Berrone and Endre Süli. Two-sided a posteriori error bounds for incompressible quasi-Newtonian flows. *IMA Journal of Numerical Analysis*, 28(2):382–421, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/382>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/382>.

Berselli:2015:OEE

- [315] Luigi C. Berselli, Lars Diening, and Michael Ruzicka. Optimal error estimate for semi-implicit space–time discretization for the equations describing incompressible generalized

Newtonian fluids. *IMA Journal of Numerical Analysis*, 35(2):680–697, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/680>.

Berselli:2022:STD

- [316] Luigi C. Berselli and Michael Ruzicka. Space-time discretization for nonlinear parabolic systems with p -structure. *IMA Journal of Numerical Analysis*, 42(1):260–299, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/260/6042029>.

Bersetche:2022:FEA

- [317] Francisco M. Bersetche and Juan Pablo Borthagaray. Finite element approximation of fractional Neumann problems. *IMA Journal of Numerical Analysis*, 42(4):3207–3240, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3207/6365220>.

Bertoluzza:2000:WSP

- [318] Silvia Bertoluzza and Angela Kunoth. Wavelet stabilization and preconditioning for domain decomposition. *IMA Journal of Numerical Analysis*, 20(4):533–559, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200533.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200533.pdf.

Bertrand:2022:FOL

- [319] Fleurianne Bertrand and Daniele Boffi. First order least-squares formulations for eigenvalue problems. *IMA Journal of Numerical Analysis*, 42(2):1339–1363, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1339/6157011>.

Bertrand:2025:NIS

- [320] Fleurianne Bertrand and Daniele Boffi. On the necessity of the inf-sup condition for a mixed finite element formulation. *IMA Journal of Numerical Analysis*, 45(1):1–35, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/1/7614496>.

Berzins:1981:GCM

- [321] M. Berzins and P. M. Dew. A generalized Chebyshev method for nonlinear parabolic equations in one space variable. *IMA Journal of Numerical Analysis*, 1(4):469–487, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Berzins:1987:NCM

- [322] M. Berzins and P. M. Dew. A note on C^0 Chebyshev methods for parabolic P.D.E.s. *IMA Journal of Numerical Analysis*, 7(1):15–37, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bespalov:2022:CRO

- [323] Alex Bespalov, Dirk Praetorius, and Michele Ruggeri. Convergence and

rate optimality of adaptive multi-level stochastic Galerkin FEM. *IMA Journal of Numerical Analysis*, 42(3):2190–2213, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2190/6277320>.

Bespalov:2010:VBE

- [324] Alexei Bespalov and Norbert Heuer. The hp version of the boundary element method with quasi-uniform meshes for weakly singular operators on surfaces. *IMA Journal of Numerical Analysis*, 30(2):377–400, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/377>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/377>.

Bespalov:2010:NBE

- [325] Alexei Bespalov and Norbert Heuer. Natural p -BEM for the electric field integral equation on screens. *IMA Journal of Numerical Analysis*, 30(3):595–628, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/595>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/595>.

Bessaih:2019:SCT

- [326] Hakima Bessaih and Annie Millet. Strong $[L^2]$ convergence of time numerical schemes for the stochastic two-dimensional Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 39(4):2135–2167, October 2019. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/2135/5091944>.

Besse:2021:EPM

- [327] Christophe Besse, Stéphane Descombes, Guillaume Dujardin, and Ingrid Lacroix-Violet. Energy-preserving methods for nonlinear Schrödinger equations. *IMA Journal of Numerical Analysis*, 41(1):618–653, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/618/5836889>.

Besse:2017:DFG

- [328] Nicolas Besse. Discontinuous Galerkin finite element methods for the gyrokinetic-waterbag equations. *IMA Journal of Numerical Analysis*, 37(2):985–1040, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/985/2669952/Discontinuous-Galerkin-finite-element-methods-for>.

Bessemoulin-Chatard:2015:DFI

- [329] Marianne Bessemoulin-Chatard, Claire Chainais-Hillairet, and Francis Filbet. On discrete functional inequalities for some finite volume schemes. *IMA Journal of Numerical Analysis*, 35(3):1125–1149, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1125>.

Bessemoulin-Chatard:2014:FVS

- [330] Marianne Bessemoulin-Chatard and Ansgar Jüngel. A finite volume scheme for a Keller–Segel model with additional cross-diffusion. *IMA Journal of Numerical Analysis*, 34(1):96–122, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/96.full.pdf+html>.

Betcke:2014:SDN

- [331] T. Betcke, J. Phillips, and E. A. Spence. Spectral decompositions and nonnormality of boundary integral operators in acoustic scattering. *IMA Journal of Numerical Analysis*, 34(2):700–731, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/700.full.pdf+html>.

Betcke:2007:GFD

- [332] Timo Betcke. A GSVD formulation of a domain decomposition method for planar eigenvalue problems. *IMA Journal of Numerical Analysis*, 27(3):451–478, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/451>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/451>.

Beyn:1990:NCC

- [333] W.-J. Beyn. The numerical computation of connecting orbits in dynamical systems. *IMA Journal of Numerical Analysis*, 10(3):379–405, 1990.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Beyn:1994:NAH

- [334] W.-J. Beyn. Numerical analysis of homoclinic orbits emanating from a Takens–Bogdanov point. *IMA Journal of Numerical Analysis*, 14(3):381–410, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bi:2011:FVE

- [335] Chunjia Bi and Victor Ginting. Finite-volume-element method for second-order quasilinear elliptic problems. *IMA Journal of Numerical Analysis*, 31(3):1062–1089, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1062.full.pdf+html>.

Bialecki:1991:SCM

- [336] Bernard Bialecki. Sinc-collocation methods for two-point boundary value problems. *IMA Journal of Numerical Analysis*, 11(3):357–375, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bialecki:2004:PGM

- [337] Journal B. Bialecki, M. Ganesh, and K. Mustapha. A Petrov–Galerkin method with quadrature for elliptic boundary value problems. *IMA Journal of Numerical Analysis*, 24(1):157–177, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240157.sgm.abs.html; <http://>

[//www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240157.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240157.pdf).

Binz:2022:CFE

Bialecki:2003:OSC

- [338] Journal Bernard Bialecki and Ryan I. Fernandes. An orthogonal spline collocation alternating direction implicit method for second-order hyperbolic problems. *IMA Journal of Numerical Analysis*, 23(4):693–718, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230693.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230693.pdf.

Binding:1993:NMU

- [339] P. A. Binding, Patrick J. Browne, and Xing Zhi Ji. A numerical method using the Prüfer transformation for the calculation of eigenpairs of two-parameter Sturm–Liouville problems. *IMA Journal of Numerical Analysis*, 13(4):559–569, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bini:2022:FFF

- [340] Dario A. Bini, Guy Latouche, and Beatrice Meini. A family of fast fixed point iterations for M/G/1-type Markov chains. *IMA Journal of Numerical Analysis*, 42(2):1454–1477, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/42/2/1454/6149431>.

- [341] Tim Binz and Balázs Kovács. A convergent finite element algorithm for generalized mean curvature flows of closed surfaces. *IMA Journal of Numerical Analysis*, 42(3):2545–2588, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/42/3/2545/6304639>.

Bir:2022:BEM

- [342] Bikram Bir, Deepjyoti Goswami, and Amiya K. Pani. Backward Euler method for the equations of motion arising in Oldroyd model of order one with nonsmooth initial data. *IMA Journal of Numerical Analysis*, 42(4):3529–3570, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/42/4/3529/6396774>.

Birgin:2003:ISP

- [343] Journal Ernesto G. Birgin, José Mario Martínez, and Marcos Raydan. Inexact spectral projected gradient methods on convex sets. *IMA Journal of Numerical Analysis*, 23(4):539–559, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230539.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230539.pdf.

Bjorhus:1998:OSA

- [344] Morten Bjørhus. Operator splitting for abstract Cauchy problems. *IMA Journal of Numerical Analysis*, 18(3):

419–443, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180419.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180419.pdf.

Blanchard:2021:ACL

- [345] Pierre Blanchard, Desmond J. Higham, and Nicholas J. Higham. Accurately computing the log-sum-exp and softmax functions. *IMA Journal of Numerical Analysis*, 41(4):2311–2330, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2311/5893596>.

Blanes:2021:CAH

- [346] Sergio Blanes, Fernando Casas, Cesáreo González, and Mechthild Thalhammer. Convergence analysis of high-order commutator-free quasi-Magnus exponential integrators for nonautonomous linear Schrödinger equations. *IMA Journal of Numerical Analysis*, 41(1):594–617, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/594/5771304>.

Blanes:2018:CAH

- [347] Sergio Blanes, Fernando Casas, and Mechthild Thalhammer. Convergence analysis of high-order commutator-free quasi-Magnus exponential integrators for nonautonomous linear evolution equations of parabolic type. *IMA Journal of Numerical Analysis*, 38(2):743–778, April 18, 2018. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/743/3799994>.

Blank:1995:SCW

- [348] Luise Blank. Stability of collocation for weakly singular Volterra equations. *IMA Journal of Numerical Analysis*, 15(3):357–375, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Blank:2013:NAC

- [349] Luise Blank, Harald Garcke, Lavinia Sarbu, and Vanessa Styles. Non-local Allen–Cahn systems: analysis and a primal-dual active set method. *IMA Journal of Numerical Analysis*, 33(4):1126–1155, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1126.full.pdf+html>.

Blaschke:1997:CRI

- [350] Barbara Blaschke, Andreas Neubauer, and Otmar Scherzer. On convergence rates for the iteratively regularized Gauss–Newton method. *IMA Journal of Numerical Analysis*, 17(3):421–436, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170421.sgm.abs.html.

Blechta:2020:LNL

- [351] Jan Blechta, Josef Málek, and Martin Vohralík. Localization of the $W^{-1,q}$ norm for local a posteriori efficiency. *IMA Journal of Numerical Analysis*,

40(2):914–950, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/914/5381201>.

Blowey:1996:NAM

- [352] J. F. Blowey, M. I. M. Copetti, and C. M. Elliott. Numerical analysis of a model for phase separation of a multi-component alloy. *IMA Journal of Numerical Analysis*, 16(1):111–139, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160111.sgm.abs.html.

Boffi:2017:RBP

- [353] Daniele Boffi, Lucia Gastaldi, Rodolfo Rodríguez, and Ivana Sebestová. Residual-based a posteriori error estimation for the Maxwell’s eigenvalue problem. *IMA Journal of Numerical Analysis*, 37(4):1710–1732, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1710/2870659>.

Boffi:2024:CLF

- [354] Daniele Boffi, Sining Gong, Johnny Guzmán, and Michael Neilan. Convergence of Lagrange finite element methods for Maxwell eigenvalue problem in 3D. *IMA Journal of Numerical Analysis*, 44(4):1911–1945, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/1911/7308484>.

Boffi:2023:CLF

- [355] Daniele Boffi, Johnny Guzmán, and Michael Neilan. Convergence of Lagrange finite elements for the Maxwell eigenvalue problem in two dimensions. *IMA Journal of Numerical Analysis*, 43(2):663–691, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/663/6533828>.

Bogli:2020:ENR

- [356] Sabine Bögli and Marco Marletta. Essential numerical ranges for linear operator pencils. *IMA Journal of Numerical Analysis*, 40(4):2256–2308, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2256/5628044>.

Bogucz:1984:FOF

- [357] E. A. Bogucz and J. D. A. Walker. Fourth-order finite-difference methods for two-point boundary value problems. *IMA Journal of Numerical Analysis*, 4(1):69–82, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Boiger:2020:RRC

- [358] R. Boiger, A. Leitão, and B. F. Svaiter. Range-relaxed criteria for choosing the Lagrange multipliers in nonstationary iterated Tikhonov method. *IMA Journal of Numerical Analysis*, 40(1):606–627, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/606/5142287>.

Boiveau:2016:PFN

- [359] Thomas Boiveau and Erik Burman. A penalty-free Nitsche method for the weak imposition of boundary conditions in compressible and incompressible elasticity. *IMA Journal of Numerical Analysis*, 36(2):770–795, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/770>.

Bokanowski:2021:BDF

- [360] Olivier Bokanowski and Kristian Debrabant. Backward differentiation formula finite difference schemes for diffusion equations with an obstacle term. *IMA Journal of Numerical Analysis*, 41(2):900–934, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/900/5864926>.

Bokil:2012:ASH

- [361] V. A. Bokil and N. L. Gibson. Analysis of spatial high-order finite difference methods for Maxwell’s equations in dispersive media. *IMA Journal of Numerical Analysis*, 32(3):926–956, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/926.full.pdf+html>.

Bolin:2020:NSF

- [362] David Bolin, Kristin Kirchner, and Mihály Kovács. Numerical solution of fractional elliptic stochastic PDEs with spatial white noise. *IMA Journal of Numerical Analysis*, 40

(2):1051–1073, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1051/5253788>.

Bollapragada:2019:EIS

- [363] Raghu Bollapragada, Richard H. Byrd, and Jorge Nocedal. Exact and inexact subsampled Newton methods for optimization. *IMA Journal of Numerical Analysis*, 39(2):545–578, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/545/4959058>.

Bonelle:2015:ACD

- [364] Jérôme Bonelle and Alexandre Ern. Analysis of compatible discrete operator schemes for the Stokes equations on polyhedral meshes. *IMA Journal of Numerical Analysis*, 35(4):1672–1697, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1672>.

Bonettini:2011:IBC

- [365] Silvia Bonettini. Inexact block coordinate descent methods with application to non-negative matrix factorization. *IMA Journal of Numerical Analysis*, 31(4):1431–1452, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1431.full.pdf+html>.

Bonito:2020:FEA

- [366] Andrea Bonito, Vivette Girault, and Endre Süli. Finite element approxima-

tion of a strain-limiting elastic model. *IMA Journal of Numerical Analysis*, 40(1):29–86, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/29/5139567>.

Bonito:2023:NAL

- [367] Andrea Bonito, Diane Guignard, Riccardo H. Nochetto, and Shuo Yang. Numerical analysis of the LDG method for large deformations of prestrained plates. *IMA Journal of Numerical Analysis*, 43(2):627–662, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/627/6517084>.

Bonito:2024:GCL

- [368] Andrea Bonito, Ricardo H Nochetto, and Shuo Yang. Gamma-convergent LDG method for large bending deformations of bilayer plates. *IMA Journal of Numerical Analysis*, 44(6):3187–3233, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3187/7515144>.

Bonito:2017:CPN

- [369] Andrea Bonito and Joseph E. Pasciak. Corrigendum to the paper “Numerical approximation of fractional powers of regularly accretive operators”. *IMA Journal of Numerical Analysis*, 37(4):2170, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2170/3100450>. See [370].

Bonito:2017:NAF

- [370] Andrea Bonito and Joseph E. Pasciak. Numerical approximation of fractional powers of regularly accretive operators. *IMA Journal of Numerical Analysis*, 37(3):1245–1273, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1245/2670037/Numerical-approximation-of-fractional-powers-of>. See corrigendum [369].

Bonizzoni:2014:MEM

- [371] Francesca Bonizzoni, Annalisa Buffa, and Fabio Nobile. Moment equations for the mixed formulation of the Hodge Laplacian with stochastic loading term. *IMA Journal of Numerical Analysis*, 34(4):1328–1360, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1328>.

Bonnaillie-Noel:2016:ENC

- [372] V. Bonnaillie-Noël, J. A. Carrillo, T. Goudon, and G. A. Pavliotis. Efficient numerical calculation of drift and diffusion coefficients in the diffusion approximation of kinetic equations. *IMA Journal of Numerical Analysis*, 36(4):1536–1569, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1536>.

Bonnans:2006:EES

- [373] J. Frédéric Bonnans, Stefania Maroso, and Housnaa Zidani. Error estimates

for stochastic differential games: the adverse stopping case. *IMA Journal of Numerical Analysis*, 26(1):188–212, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/188>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/188>.

Bootland:2023:OSM

- [374] Niall Bootland, Victorita Dolean, Ivan G. Graham, Chupeng Ma, and Robert Scheichl. Overlapping Schwarz methods with GenEO coarse spaces for indefinite and nonself-adjoint problems. *IMA Journal of Numerical Analysis*, 43(4):1899–1936, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/1899/6652186>.

Borm:2021:VOD

- [375] Steffen Börm, Maria Lopez-Fernandez, and Stefan A. Sauter. Variable order, directional H^2 -matrices for Helmholtz problems with complex frequency. *IMA Journal of Numerical Analysis*, 41(4):2896–2935, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2896/6032776>.

Bornemann:2007:MUN

- [376] Folkmar Bornemann. A model for understanding numerical stability. *IMA Journal of Numerical Analysis*, 27(2):219–231, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/219>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/219>.

<http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/219>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/219>.

Bornemann:2013:OCH

[377] Folkmar Bornemann and Georg Wechsberger. Optimal contours for high-order derivatives. *IMA Journal of Numerical Analysis*, 33(2):403–412, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/403.full.pdf+html>.

Borsdorf:2010:PNA

- [378] Rüdiger Borsdorf and Nicholas J. Higham. A preconditioned Newton algorithm for the nearest correlation matrix. *IMA Journal of Numerical Analysis*, 30(1):94–107, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/94>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/94>.

Borsos:2022:QNV

- [379] B. Borsos and J. Karátson. Quasi-Newton variable preconditioning for nonlinear nonuniformly monotone elliptic problems posed in Banach spaces. *IMA Journal of Numerical Analysis*, 42(2):1806–1830, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1806/6276023>.

Borwein:1992:FEG

- [380] J. M. Borwein and I. J. Zucker. Fast evaluation of the gamma function for small rational fractions using complete elliptic integrals of the first kind. *IMA Journal of Numerical Analysis*, 12(4):519–526, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bos:2017:TPA

- [381] L. Bos, S. De Marchi, and M. Vianello. Trivariate polynomial approximation on Lissajous curves. *IMA Journal of Numerical Analysis*, 37(1):519–541, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/519/2669953/Trivariate-polynomial-approximation-on-Lissajous>.

Bou-Rabee:2013:NMM

- [382] N. Bou-Rabee and M. Hairer. Nonasymptotic mixing of the MALA algorithm. *IMA Journal of Numerical Analysis*, 33(1):80–110, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/80.full.pdf+html>.

Bou-Rabee:2009:SVI

- [383] Nawaf Bou-Rabee and Houman Owhadi. Stochastic variational integrators. *IMA Journal of Numerical Analysis*, 29(2):421–443, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/>

[abstract/29/2/421; http://imajna.oxfordjournals.org/cgi/reprint/29/2/421](http://imajna.oxfordjournals.org/cgi/reprint/29/2/421).

Boubendir:2013:WNE

- [384] Yassine Boubendir and Catalin Turc. Wave-number estimates for regularized combined field boundary integral operators in acoustic scattering problems with Neumann boundary conditions. *IMA Journal of Numerical Analysis*, 33(4):1176–1225, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1176.full.pdf+html>.

Boubendir:2016:HON

- [385] Yassine Boubendir, Catalin Turc, and Víctor Domínguez. High-order Nyström discretizations for the solution of integral equation formulations of two-dimensional Helmholtz transmission problems. *IMA Journal of Numerical Analysis*, 36(1):463–492, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/463>.

Bouche:2015:CCD

- [386] Daniel Bouche, Francis Collino, Yoann Morel, and Olivier Vacus. Characteristic current decomposition and radar cross-section analysis for perfectly electrically conducting bodies. *IMA Journal of Numerical Analysis*, 35(1):454–477, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/454>.

Bouchut:2014:CTV

- [387] François Bouchut, David Doyen, and Robert Eymard. Convection and total variation flow. *IMA Journal of Numerical Analysis*, 34(3):1037–1071, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1037>.

Bouchut:2017:CTV

- [388] François Bouchut, David Doyen, and Robert Eymard. Convection and total variation flow-erratum and improvement. *IMA Journal of Numerical Analysis*, 37(4):2139–2169, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2139/3038028>.

Bouharguane:2018:SMD

- [389] Afaf Bouharguane and Benjamin Melinand. A splitting method for deep water with bathymetry. *IMA Journal of Numerical Analysis*, 38(3):1324–1350, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1324/4056072>.

Boulmezaoud:2005:MSE

- [390] Tahar Z. Boulmezaoud and Mohammed El Rhabi. A mortar spectral element method for 3D Maxwell’s equations. *IMA Journal of Numerical Analysis*, 25(3):577–610, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/>

[abstract/25/3/577; http://imanum.oxfordjournals.org/cgi/reprint/25/3/577](http://imanum.oxfordjournals.org/cgi/reprint/25/3/577).

Boulton:2007:NVA

- [391] Lyonell Boulton. Non-variational approximation of discrete eigenvalues of self-adjoint operators. *IMA Journal of Numerical Analysis*, 27(1):102–121, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/102>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/102>.

Boulton:2016:CQM

- [392] Lyonell Boulton and Aatef Hobiny. On the convergence of the quadratic method. *IMA Journal of Numerical Analysis*, 36(3):1310–1333, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1310>.

Boumal:2019:GRC

- [393] Nicolas Boumal, P-A Absil, and Coralia Cartis. Global rates of convergence for nonconvex optimization on manifolds. *IMA Journal of Numerical Analysis*, 39(1):1–33, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/1/4836777>. See [394].

Boumal:2020:EGR

- [394] Nicolas Boumal, P-A. Absil, and Coralia Cartis. Erratum to: “Global rates of convergence for nonconvex

optimization on manifolds". *IMA Journal of Numerical Analysis*, 40(4):2940, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2940/5730315>. See [393].

Boumenir:2001:CNE

- [395] A. Boumenir and B. Chanane. The computation of negative eigenvalues of singular Sturm–Liouville problems. *IMA Journal of Numerical Analysis*, 21(2):489–501, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210489.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210489.pdf.

Boutelje:2010:NSL

- [396] B. R. Boutelje and A. T. Hill. Nonautonomous stability of linear multistep methods. *IMA Journal of Numerical Analysis*, 30(2):525–542, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/525>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/525>.

Boutin:2024:CST

- [397] Benjamin Boutin, Pierre Le Barbanchon, and Nicolas Seguin. Correction to: On the stability of totally upwind schemes for the hyperbolic initial boundary value problem. *IMA Journal of Numerical Analysis*, 44(4):2550–2551, July 2024. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2550/7252023>. See [398].

Boutin:2024:STU

- [398] Benjamin Boutin, Pierre Le Barbanchon, and Nicolas Seguin. On the stability of totally upwind schemes for the hyperbolic initial boundary value problem. *IMA Journal of Numerical Analysis*, 44(2):1211–1241, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/1211/7194068>. See correction [397].

Boyaval:2022:FVA

- [399] Sébastien Boyaval, Sofiane Martel, and Julien Reygner. Finite-volume approximation of the invariant measure of a viscous stochastic scalar conservation law. *IMA Journal of Numerical Analysis*, 42(3):2710–2770, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2710/6318665>.

Boyer:2012:AUF

- [400] Franck Boyer. Analysis of the upwind finite volume method for general initial- and boundary-value transport problems. *IMA Journal of Numerical Analysis*, 32(4):1404–1439, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1404.full.pdf+html>.

Boyer:2010:NSA

- [401] Franck Boyer, Florence Hubert, and

Stella Krell. Nonoverlapping Schwarz algorithm for solving two-dimensional m-DDFV schemes. *IMA Journal of Numerical Analysis*, 30(4):1062–1100, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1062.full.pdf+html>.

Bozzini:2015:IVS

- [402] Mira Bozzini, Licia Lenarduzzi, Milvia Rossini, and Robert Schaback. Interpolation with variably scaled kernels. *IMA Journal of Numerical Analysis*, 35(1):199–219, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/199>.

Bradji:2007:ODC

- [403] Abdallah Bradji and Ahmed-Salah Chibi. Optimal defect corrections on composite nonmatching finite-element meshes. *IMA Journal of Numerical Analysis*, 27(4):765–780, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/765>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/765>.

Bradji:2008:DCH

- [404] Abdallah Bradji and Raphaële Herbin. Discretization of coupled heat and electrical diffusion problems by finite-element and finite-volume methods. *IMA Journal of Numerical Analysis*, 28(3):469–495, July 2008. CODEN IJNADH. ISSN

0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/469>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/469>.

Bradley:2023:EBD

- [405] Susanne Bradley and Chen Greif. Eigenvalue bounds for double saddle-point systems. *IMA Journal of Numerical Analysis*, 43(6):3564–3592, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3564/6955816>.

Braess:1986:NSB

- [406] D. Braess and P. Peisker. On the numerical solution of the biharmonic equation and the role of squaring matrices for preconditioning. *IMA Journal of Numerical Analysis*, 6(4):393–404, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Braess:1983:NSO

- [407] Dietrich Braess. On the numerical solution of the one-dimensional Stefan problem by Newton’s method. *IMA Journal of Numerical Analysis*, 3(2):161–172, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Braess:2005:AES

- [408] Dietrich Braess and Wolfgang Hackbusch. Approximation of $1/x$ by exponential sums in $[1, \infty)$. *IMA Journal of Numerical Analysis*, 25(4):685–697, October 2005. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/685>.

Braess:2020:EBP

- [409] Dietrich Braess, Astrid S. Pechstein, and Joachim Schöberl. An equilibration-based a posteriori error bound for the biharmonic equation and two finite element methods. *IMA Journal of Numerical Analysis*, 40(2):951–975, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/951/5344991>.

Brandts:2006:NLS

- [410] Jan Brandts, Yanping Chen, and Julie Yang. A note on least-squares mixed finite elements in relation to standard and mixed finite elements. *IMA Journal of Numerical Analysis*, 26(4):779–789, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/779>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/779>.

Brandts:2003:GSU

- [411] Jan Brandts and Michal Křížek. Gradient superconvergence on uniform simplicial partitions of polytopes. *IMA Journal of Numerical Analysis*, 23(3):489–505, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/230489.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/230489.pdf.

Brankin:1989:SPL

- [412] R. W. Brankin and I. Gladwell. Shape-preserving local interpolation for plotting solutions of ODEs. *IMA Journal of Numerical Analysis*, 9(4):555–566, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Brannigan:1981:TCB

- [413] M. Brannigan. Theory and computation of best strict constrained Chebyshev approximation of discrete data. *IMA Journal of Numerical Analysis*, 1(2):169–184, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Brass:1990:OER

- [414] H. Brass. Optimal estimation rules for functions of high smoothness. *IMA Journal of Numerical Analysis*, 10(1):129–136, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Breda:2012:CEG

- [415] Dimitri Breda, Rossana Vermiglio, and Stefano Maset. Computing the eigenvalues of Gurtin–MacCamy models with diffusion. *IMA Journal of Numerical Analysis*, 32(3):1030–1050, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1030.full.pdf+html>.

Breda:2004:CCR

- [416] Journal D. Breda, S. Maset, and R. Vermiglio. Computing the characteristic roots for delay differential equations. *IMA Journal of Nu-*

- merical Analysis*, 24(1):1–19, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240001.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240001.pdf.
- Brehier:2019:SCR**
- [417] Charles-Edouard Bréhier, Jianbo Cui, and Jialin Hong. Strong convergence rates of semidiscrete splitting approximations for the stochastic Allen–Cahn equation. *IMA Journal of Numerical Analysis*, 39(4):2096–2134, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/2096/5060929>.
- Brehier:2017:AIL**
- [418] Charles-Edouard Bréhier and Marie Kopec. Approximation of the invariant law of SPDEs: error analysis using a Poisson equation for a full-discretization scheme. *IMA Journal of Numerical Analysis*, 37(3):1375–1410, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1375/2669999/Approximation-of-the-invariant-law-of-SPDEs-error>.
- Breiding:2020:ACN**
- [419] Paul Breiding and Nick Vannieuwenhoven. On the average condition number of tensor rank decompositions. *IMA Journal of Numerical Analysis*, 40(3):1908–1936, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1908/5519045>.
- Breit:2021:PPL**
- [420] Dominic Breit, Lars Diening, Johannes Storn, and Jörn Wichmann. The parabolic p -Laplacian with fractional differentiability. *IMA Journal of Numerical Analysis*, 41(3):2110–2138, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/2110/6027831>.
- Breit:2020:STA**
- [421] Dominic Breit and Prince Romeo Mensah. Space-time approximation of parabolic systems with variable growth. *IMA Journal of Numerical Analysis*, 40(4):2505–2552, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2505/5628042>.
- Breit:2023:NAT**
- [422] Dominic Breit and Andreas Prohl. Numerical analysis of two-dimensional Navier–Stokes equations with additive stochastic forcing. *IMA Journal of Numerical Analysis*, 43(3):1391–1421, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1391/6617744>.
- Bremer:2020:FAJ**
- [423] James Bremer and Haizhao Yang. Fast algorithms for Jacobi expansions via

nonoscillatory phase functions. *IMA Journal of Numerical Analysis*, 40(3):2019–2051, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/2019/5442213>.

Brenner:2014:PEA

- [424] Andreas Brenner, Eberhard Bänsch, and Markus Bause. A priori error analysis for finite element approximations of the Stokes problem on dynamic meshes. *IMA Journal of Numerical Analysis*, 34(1):123–146, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/123.full.pdf+html>.

Brenner:2023:GDM

- [425] K. Brenner, Florent Chave, and R. Masson. Gradient discretization of a 3D–2D–1D mixed-dimensional diffusive model with resolved interface, application to the drying of a fractured porous medium. *IMA Journal of Numerical Analysis*, 43(6):3522–3563, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3522/6955815>.

Brenner:2017:GDH

- [426] K. Brenner, J. Hennicker, R. Masson, and P. Samier. Gradient discretization of hybrid-dimensional Darcy flow in fractured porous media with discontinuous pressures at matrix-fracture interfaces. *IMA Journal of Numerical Analysis*, 37(3):1551–

1585, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1551/2670042/Gradient-discretization-of-hybrid-dimensional>.

Brenner:2022:TVB

- [427] K. Brenner, R. Masson, E. H. Quenjel, and J. Droniou. Total velocity-based finite volume discretization of two-phase Darcy flow in highly heterogeneous media with discontinuous capillary pressure. *IMA Journal of Numerical Analysis*, 42(2):1231–1272, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1231/6254233>.

Brenner:2010:PEE

- [428] Susanne C. Brenner, Thirupathi Gudi, and Li yeng Sung. An a posteriori error estimator for a quadratic C^0 -interior penalty method for the biharmonic problem. *IMA Journal of Numerical Analysis*, 30(3):777–798, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/777>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/777>.

Brenner:2020:FEM

- [429] Susanne C. Brenner, Li yeng Sung, and Joscha Gedicke. P_1 finite element methods for an elliptic optimal control problem with pointwise state constraints. *IMA Journal of Numerical Analysis*, 40(1):1–28, January 2020. CODEN IJNADH. ISSN 0272-4979

(print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/1/5177806>.

Bressan:2011:IRD

- [430] Andrea Bressan. Isogeometric regular discretization for the Stokes problem. *IMA Journal of Numerical Analysis*, 31(4):1334–1356, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1334.full.pdf+html>.

Bressan:2021:BCA

- [431] Andrea Bressan, Michael S. Floater, and Espen Sande. On best constants in L^2 approximation. *IMA Journal of Numerical Analysis*, 41(4):2830–2840, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2830/5896483>.

Bressan:2018:ISS

- [432] Andrea Bressan and Bert Jüttler. Inf-sup stability of isogeometric Taylor–Hood and sub-grid methods for the Stokes problem with hierarchical splines. *IMA Journal of Numerical Analysis*, 38(2):955–975, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/955/4099778>.

Bressan:2013:IDS

- [433] Andrea Bressan and Giancarlo Sangalli. Isogeometric discretizations of the Stokes problem: stability

analysis by the macroelement technique. *IMA Journal of Numerical Analysis*, 33(2):629–651, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/629.full.pdf+html>.

Brett:2016:OCE

- [434] Charles Brett, Andreas Dedner, and Charles Elliott. Optimal control of elliptic PDEs at points. *IMA Journal of Numerical Analysis*, 36(3):1015–1050, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1015>.

Brezinski:1983:ECC

- [435] Claude Brezinski. Error control in convergence acceleration processes. *IMA Journal of Numerical Analysis*, 3(1):65–80, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Brezinski:2022:SAT

- [436] Claude Brezinski, Stefano Cipolla, Michela Redivo-Zaglia, and Yousef Saad. Shanks and Anderson-type acceleration techniques for systems of nonlinear equations. *IMA Journal of Numerical Analysis*, 42(4):3058–3093, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3058/6354546>.

Briggs:2002:FDA

- [437] A. J. Briggs, J. R. Claisse, and C. M. Elliott. Finite-difference ap-

- proximation of a one-dimensional Hamilton–Jacobi/elliptic system arising in superconductivity. *IMA Journal of Numerical Analysis*, 22(1):89–131, January 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220089.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220089.pdf.
- Brink:1996:CRC**
- [438] Ulrich Brink and Ernst P. Stephan. Convergence rates for the coupling of FEM and collocation BEM. *IMA Journal of Numerical Analysis*, 16(1):93–110, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160093.sgm.abs.html.
- Brix:2015:MPD**
- [439] Kolja Brix, Martin Campos Pinto, Claudio Canuto, and Wolfgang Dahmen. Multilevel preconditioning of discontinuous Galerkin spectral element methods. Part I: geometrically conforming meshes. *IMA Journal of Numerical Analysis*, 35(4):1487–1532, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1487>.
- Broersen:2015:PGD**
- [440] Dirk Broersen and Rob P. Stevenson. A Petrov–Galerkin discretization with optimal test space of a mild-weak formulation of convection-diffusion equations in mixed form. *IMA Journal of Numerical Analysis*, 35(1):39–73, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/39>.
- Bronsard:2024:SLR**
- [441] Yvonne Alama Bronsard. A symmetric low-regularity integrator for the nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 44(6):3648–3682, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3648/7473697>.
- Brown:2004:SIS**
- [442] Journal B. M. Brown and M. Marletta. Spectral inclusion and spectral exactness for PDEs on exterior domains. *IMA Journal of Numerical Analysis*, 24(1):21–43, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240021.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240021.pdf.
- Brown:1982:VII**
- [443] N. G. Brown and R. Wait. Verification and inversion of isoparametric transformations. *IMA Journal of Numerical Analysis*, 2(4):481–492, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Browne:1982:NTM**
- [444] Patrick J. Browne and B. D. Sleeman. A numerical technique for multiparameter eigenvalue problems. *IMA*

Journal of Numerical Analysis, 2(4): 451–457, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Brownlee:2004:AOI

- [445] Rob Brownlee and Will Light. Approximation orders for interpolation by surface splines to rough functions. *IMA Journal of Numerical Analysis*, 24(2):179–192, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240179.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240179.pdf.

Brugiapaglia:2021:WFC

- [446] S. Brugiapaglia, S. Micheletti, F. Nobile, and S. Perotto. Wavelet-Fourier CORSING techniques for multidimensional advection-diffusion-reaction equations. *IMA Journal of Numerical Analysis*, 41(4):2744–2781, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2744/5892041>.

Brumm:2014:HMM

- [447] Bernd Brumm and Daniel Weiss. Heterogeneous multiscale methods for highly oscillatory mechanical systems with solution-dependent frequencies. *IMA Journal of Numerical Analysis*, 34(1):55–82, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/55.full.pdf+html>.

Brunner:1989:NST

- [448] H. Brunner and J.-P. Kauthen. The numerical solution of two-dimensional Volterra integral equations by collocation and iterated collocation. *IMA Journal of Numerical Analysis*, 9(1): 47–59, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Brunner:1986:PSC

- [449] Hermann Brunner. Polynomial spline collocation methods for Volterra integrodifferential equations with weakly singular kernels. *IMA Journal of Numerical Analysis*, 6(2):221–239, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Brunner:2009:DGA

- [450] Hermann Brunner, Penny J. Davies, and Dugald B. Duncan. Discontinuous Galerkin approximations for Volterra integral equations of the first kind. *IMA Journal of Numerical Analysis*, 29(4):856–881, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/856>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/856>.

Brunner:2012:GCL

- [451] Hermann Brunner, Penny J. Davies, and Dugald B. Duncan. Global convergence and local superconvergence of first-kind Volterra integral equation approximations. *IMA Journal of Numerical Analysis*, 32(3):1117–1146, July 2012. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1117.full.pdf+html>.

Brunner:2001:GMC

- [452] Hermann Brunner, Qiya Hu, and Qun Lin. Geometric meshes in collocation methods for Volterra integral equations with proportional delays. *IMA Journal of Numerical Analysis*, 21(4):783–798, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210783.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210783.pdf.

Brunner:2010:SPC

- [453] Hermann Brunner, Arieh Iserles, and Syvert P. Nørsett. The spectral problem for a class of highly oscillatory Fredholm integral operators. *IMA Journal of Numerical Analysis*, 30(1):108–130, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/108>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/108>.

Brunner:2011:ACS

- [454] Hermann Brunner, Hehu Xie, and Ran Zhang. Analysis of collocation solutions for a class of functional equations with vanishing delays. *IMA Journal of Numerical Analysis*, 31(2):698–718, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/698.full.pdf+html>.

[oxfordjournals.org/content/31/2/698.full.pdf+html](http://imajna.oxfordjournals.org/content/31/2/698.full.pdf+html).

Brunner:2024:AFQ

- [455] Maximilian Brunner, Michael Innerberger, Ani Miraçi, Dirk Praetorius, Julian Streitberger, and Pascal Heid. Adaptive FEM with quasi-optimal overall cost for nonsymmetric linear elliptic PDEs. *IMA Journal of Numerical Analysis*, 44(3):1560–1596, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1560/7198102>. See corrigendum [456].

Brunner:2024:CAF

- [456] Maximilian Brunner, Michael Innerberger, Ani Miraçi, Dirk Praetorius, Julian Streitberger, and Pascal Heid. Corrigendum to: Adaptive FEM with quasi-optimal overall cost for nonsymmetric linear elliptic PDEs. *IMA Journal of Numerical Analysis*, 44(3):1903–1909, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1903/7560585>. See [455].

Brutman:1986:GAP

- [457] L. Brutman. Generalized alternating polynomials, some properties and numerical applications. *IMA Journal of Numerical Analysis*, 6(2):125–136, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Brutman:1990:IPA

- [458] L. Brutman, P. Vértési, and Y. Xu. Interpolation by polynomials in z and

z^{-1} on an annulus. *IMA Journal of Numerical Analysis*, 10(2):235–241, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bryson:2005:SDC

- [459] Steve Bryson, Alexander Kurganov, Doron Levy, and Guergana Petrova. Semi-discrete central-upwind schemes with reduced dissipation for Hamilton–Jacobi equations. *IMA Journal of Numerical Analysis*, 25(1):113–138, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/113>; <http://imanum.oupjournals.org/cgi/reprint/25/1/113>.

Buchholz:2018:CGB

- [460] Simone Buchholz, Ludwig Gauckler, Volker Grimm, Marlis Hochbruck, and Tobias Jahnke. Closing the gap between trigonometric integrators and splitting methods for highly oscillatory differential equations. *IMA Journal of Numerical Analysis*, 38(1):57–74, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/57/3065608>.

Buckwar:2005:WAS

- [461] Evelyn Buckwar and Tony Shardlow. Weak approximation of stochastic differential delay equations. *IMA Journal of Numerical Analysis*, 25(1):57–86, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/>

25/1/57; <http://imanum.oupjournals.org/cgi/reprint/25/1/57>.

Buffa:2023:EPE

- [462] Annalisa Buffa, Ondine Chanon, and Rafael Vázquez. An *a posteriori* error estimator for isogeometric analysis on trimmed geometries. *IMA Journal of Numerical Analysis*, 43(5):2533–2561, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2533/6771874>.

Buffa:2017:RSL

- [463] Annalisa Buffa and Eduardo M. Garau. Refinable spaces and local approximation estimates for hierarchical splines. *IMA Journal of Numerical Analysis*, 37(3):1125–1149, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1125/2670017/Refinable-spaces-and-local-approximation-estimates>.

Buffa:2009:CEB

- [464] Annalisa Buffa and Christoph Ortner. Compact embeddings of broken Sobolev spaces and applications. *IMA Journal of Numerical Analysis*, 29(4):827–855, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/827>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/827>.

Buhmann:1988:CUQ

- [465] M. D. Buhmann. Convergence of univariate quasi-interpolation using multi-

quadrics. *IMA Journal of Numerical Analysis*, 8(3):365–383, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Buhmann:1992:DDN

- [466] M. D. Buhmann and A. Iserles. On the dynamics of a discretized neutral equation. *IMA Journal of Numerical Analysis*, 12(3):339–363, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

Buhmann:2022:SPD

- [467] Martin Buhmann and Janin Jäger. Strictly positive definite kernels on the 2-sphere: from radial symmetry to eigenvalue block structure. *IMA Journal of Numerical Analysis*, 42(2):1500–1525, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1500/6261429>.

Buhmann:2020:ANC

- [468] Martin D. Buhmann, Stefano De Marchi, and Emma Perracchione. Analysis of a new class of rational RBF expansions. *IMA Journal of Numerical Analysis*, 40(3):1972–1993, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1972/5431586>. See erratum [469].

Buhmann:2020:EAN

- [469] Martin D. Buhmann, Stefano De Marchi, and Emma Perracchione. Erratum to: Analysis of a new class

of rational RBF expansions. *IMA Journal of Numerical Analysis*, 40(4):2941, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2941/5753582>. See [468].

Buhmann:2010:NRB

- [470] Martin D. Buhmann, Slawomir Dinew, and Elisabeth Larsson. A note on radial basis function interpolant limits. *IMA Journal of Numerical Analysis*, 30(2):543–554, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/543>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/543>.

Bujalska:1982:QS

- [471] A. Bujalska and R. Smarzewski. Quadratic X -splines. *IMA Journal of Numerical Analysis*, 2(1):37–47, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bujanda:2007:OCL

- [472] B. Bujanda and J. C. Jorge. Order conditions for linearly implicit fractional step Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 27(4):781–797, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/781>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/781>.

Bultheel:2010:RQF

- [473] A. Bultheel, P. González-Vera, E. Hendriksen, and O. Njåstad. Rational quadrature formulas on the unit circle with prescribed nodes and maximal domain of validity. *IMA Journal of Numerical Analysis*, 30(4):940–963, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/940.full.pdf+html>.

Bungert:2023:UCR

- [474] Leon Bungert, Jeff Calder, and Tim Roith. Uniform convergence rates for Lipschitz learning on graphs. *IMA Journal of Numerical Analysis*, 43(4):2445–2495, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2445/6705556>.

Burger:2024:DCM

- [475] Raimund Bürger, Arbaz Khan, Paul E Méndez, and Ricardo Ruiz-Baier. Divergence-conforming methods for transient double-diffusive flows: *a priori* and *a posteriori* error analysis. *IMA Journal of Numerical Analysis*, 44(6):3520–3572, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3520/7460331>.

Burke:2003:RSC

- [476] J. V. Burke, A. S. Lewis, and M. L. Overton. Robust stability and a criss-cross algorithm for pseudospectra. *IMA Journal of Numerical Analysis*, 23(3):

359–375, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/drg004.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg004.pdf.

Burke:2008:SSR

- [477] J. V. Burke, A. S. Lewis, and M. L. Overton. The speed of Shor’s R-algorithm. *IMA Journal of Numerical Analysis*, 28(4):711–720, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/711>.

Burman:2021:UHH

- [478] Erik Burman, Guillaume Delay, and Alexandre Ern. An unfitted hybrid high-order method for the Stokes interface problem. *IMA Journal of Numerical Analysis*, 41(4):2362–2387, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2362/5903421>.

Burman:2009:WEE

- [479] Erik Burman, Johnny Guzmán, and Dmitriy Leykekhman. Weighted error estimates of the continuous interior penalty method for singularly perturbed problems. *IMA Journal of Numerical Analysis*, 29(2):284–314, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/284>; <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/284>; <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/284>.

oxfordjournals.org/cgi/reprint/
29/2/284.

Burman:2018:RFE

- [480] Erik Burman, Johnny Guzmán, Manuel A. Sánchez, and Marcus Sarkis. Robust flux error estimation of an unfitted Nitsche method for high-contrast interface problems. *IMA Journal of Numerical Analysis*, 38(2):646–668, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/646/3829613>.

Burman:2010:IPS

- [481] Erik Burman and Peter Hansbo. Interior-penalty-stabilized Lagrange multiplier methods for the finite-element solution of elliptic interface problems. *IMA Journal of Numerical Analysis*, 30(3):870–885, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/870>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/870>.

Burman:2017:CDG

- [482] Erik Burman, Peter Hansbo, Mats G. Larson, and André Massing. A cut discontinuous Galerkin method for the Laplace–Beltrami operator. *IMA Journal of Numerical Analysis*, 37(1):138–169, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/138/2884281/A-cut-discontinuous-Galerkin-method-for-the>.

Burman:2022:EPE

- [483] Erik Burman, Cuiyu He, and Mats G. Larson. *A posteriori* error estimates with boundary correction for a cut finite element method. *IMA Journal of Numerical Analysis*, 42(1):333–362, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/333/6041856>.

Burrage:1985:SPS

- [484] K. Burrage and F. H. Chipman. The stability properties of singly-implicit general linear methods. *IMA Journal of Numerical Analysis*, 5(3):287–295, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Burrage:1987:ASG

- [485] Kevin Burrage. (k, l) -algebraic stability of Gauss methods. *IMA Journal of Numerical Analysis*, 7(2):251–259, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Burrage:1988:ASR

- [486] Kevin Burrage. (k, l) -algebraic stability of Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 8(3):385–400, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Burrage:1988:OPI

- [487] Kevin Burrage. Order properties of implicit multivalued methods for ordinary differential equations. *IMA Journal of Numerical Analysis*, 8(1):43–69, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Buscaglia:2012:IEF

- [488] Gustavo C. Buscaglia and Abdelatif Agouzal. Interpolation estimate for a finite-element space with embedded discontinuities. *IMA Journal of Numerical Analysis*, 32(2):672–686, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/672.full.pdf+html>.

Buscaglia:2015:FEM

- [489] Gustavo C. Buscaglia and Vitoriano Ruas. Finite element methods for the Stokes system with interface pressure discontinuities. *IMA Journal of Numerical Analysis*, 35(1):220–238, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/220>.

Bustinza:2008:CLD

- [490] Rommel Bustinza, Gabriel N. Gatica, and Francisco-Javier Sayas. On the coupling of local discontinuous Galerkin and boundary element methods for non-linear exterior transmission problems. *IMA Journal of Numerical Analysis*, 28(2):225–244, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/225>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/225>.

Butcher:1986:OOS

- [491] J. C. Butcher. Optimal order and step-size sequences. *IMA Journal of Nu-*

merical Analysis, 6(4):433–438, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Butcher:2010:TBS

- [492] J. C. Butcher. Trees, B-series and exponential integrators. *IMA Journal of Numerical Analysis*, 30(1):131–140, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/131>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/131>.

Caceres:2017:MVE

- [493] Ernesto Cáceres and Gabriel N. Gatica. A mixed virtual element method for the pseudostress–velocity formulation of the Stokes problem. *IMA Journal of Numerical Analysis*, 37(1):296–331, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/296/2669934/A-mixed-virtual-element-method-for-the>.

Cahlon:1992:NSF

- [494] B. Cahlon and D. Schmidt. Numerical solutions for functional integral equations. *IMA Journal of Numerical Analysis*, 12(4):527–543, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cahlon:1982:PPA

- [495] Baruch Cahlon and Darrell Schmidt. Piecewise polynomial approximate solutions of an automatic control problem. *IMA Journal of Numerical Analysis*, 2(1):1–19, January 1982. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Caloz:1997:SAR

Cai:1999:APD

- [496] Xing Cai, Bjørn Fredrik Nielsen, and Aslak Tveito. An analysis of a preconditioner for the discretized pressure equation arising in reservoir simulation. *IMA Journal of Numerical Analysis*, 19(2):291–316, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190291.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190291.pdf.

Caillaud:2023:EEF

- [497] Corentin Caillaud and Antonin Chambolle. Error estimates for finite differences approximations of the total variation. *IMA Journal of Numerical Analysis*, 43(2):692–736, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/692/6550478>.

Calgaro:2024:DGN

- [498] Caterina Calgaro, Clément Cancès, and Emmanuel Creusé. Discrete Gagliardo–Nirenberg inequality and application to the finite volume approximation of a convection-diffusion equation with a Joule effect term. *IMA Journal of Numerical Analysis*, 44(4):2394–2436, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2394/7251983>.

- [499] Gabriel Caloz. Stability of the approximation of a regular solution branch. *IMA Journal of Numerical Analysis*, 17(2):285–303, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170285.sgm.abs.html.

Calvo:1996:GEE

- [500] M. Calvo, D. J. Higham, J. I. Montijano, and L. Rández. Global error estimation with adaptive explicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 16(1):47–63, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160047.sgm.abs.html.

Calvo:2002:HOS

- [501] M. P. Calvo. High order starting iterates for implicit Runge–Kutta methods: an improvement for variable-step symplectic integrators. *IMA Journal of Numerical Analysis*, 22(1):153–166, January 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220153.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220153.pdf.

Calvo:1999:CMT

- [502] M. P. Calvo, A. Iserles, and A. Zanna. Conservative methods for the Toda lattice equations. *IMA Journal of Numerical Analysis*, 19(4):509–523, October 1999. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190509.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190509.pdf.

Camacho:2015:PPE

- [503] Fernando Camacho and Alan Demlow. L_2 and pointwise a posteriori error estimates for FEM for elliptic PDEs on surfaces. *IMA Journal of Numerical Analysis*, 35(3):1199–1227, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1199>.

Camano:2018:EAA

- [504] Jessika Camaño, Ricardo Oyarzúa, Ricardo Ruiz-Baier, and Giordano Tierra. Error analysis of an augmented mixed method for the Navier–Stokes problem with mixed boundary conditions. *IMA Journal of Numerical Analysis*, 38(3):1452–1484, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1452/4082917>.

Cameron:1983:SDA

- [505] Ian T. Cameron. Solution of differential-algebraic systems using diagonally implicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 3(3):273–289, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cameron:1985:API

- [506] R. F. Cameron and S. McKee. The analysis of product integration meth-

ods for Abel’s equation using discrete fractional differentiation. *IMA Journal of Numerical Analysis*, 5(3):339–353, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Campos:2011:QFI

- [507] Rafael G. Campos, Francisco Domínguez Mota, and E. Coronado. Quadrature formulas for integral transforms generated by orthogonal polynomials. *IMA Journal of Numerical Analysis*, 31(3):1181–1193, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1181.full.pdf+html>.

Cances:2021:NAF

- [508] Clément Cancès, Claire Chainais-Hillairet, Jürgen Fuhrmann, and Benoît Gaudeul. A numerical-analysis-focused comparison of several finite volume schemes for a unipolar degenerate drift-diffusion model. *IMA Journal of Numerical Analysis*, 41(1):271–314, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/271/5872000>.

Cances:2024:FVS

- [509] Clément Cancès, Virginie Ehrlicher, and Laurent Monasse. Finite volumes for the Stefan–Maxwell cross-diffusion system. *IMA Journal of Numerical Analysis*, 44(2):1029–1060, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/1029/7188924>.

Cances:2018:TGM

- [510] Eric Cancès, Rachida Chakir, Lianhua He, and Yvon Maday. Two-grid methods for a class of nonlinear elliptic eigenvalue problems. *IMA Journal of Numerical Analysis*, 38(2): 605–645, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/605/3866674>.

Cances:2021:PPP

- [511] Eric Cancès, Geneviève Dusson, Yvon Maday, Benjamin Stamm, and Martin Vohralík. Post-processing of the planewave approximation of Schrödinger equations. Part I: linear operators. *IMA Journal of Numerical Analysis*, 41(4):2423–2455, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2423/5906626>.

Cangiani:2020:VEM

- [512] A. Cangiani, P. Chatzipantelidis, G. Diwan, and E. H. Georgoulis. Virtual element method for quasilinear elliptic problems. *IMA Journal of Numerical Analysis*, 40(4):2450–2472, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2450/5586239>.

Cangiani:2014:ADG

- [513] Andrea Cangiani, Emmanuil H. Georgoulis, and Stephen Metcalfe. Adaptive discontinuous Galerkin methods for nonstationary convection-diffusion

problems. *IMA Journal of Numerical Analysis*, 34(4):1578–1597, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1578>.

Cangiani:2017:CNV

- [514] Andrea Cangiani, Gianmarco Manzini, and Oliver J. Sutton. Conforming and nonconforming virtual element methods for elliptic problems. *IMA Journal of Numerical Analysis*, 37(3): 1317–1354, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1317/2670019/Conforming-and-nonconforming-virtual-element>.

Cano:2010:MCM

- [515] B. Cano and M. J. Moreta. Multi-step cosine methods for second-order partial differential systems. *IMA Journal of Numerical Analysis*, 30(2):431–461, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/431>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/431>.

Cano:1998:EGN

- [516] B. Cano and J. M. Sanz-Serna. Error growth in the numerical integration of periodic orbits by multistep methods, with application to reversible systems. *IMA Journal of Numerical Analysis*, 18(1):57–75, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/

Issue_01/180057.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180057.pdf.

Canuto:2014:BPC

- [517] Claudio Canuto, Luca F. Pavarino, and Alexandre B. Pieri. BDDC preconditioners for continuous and discontinuous Galerkin methods using spectral/ hp elements with variable local polynomial degree. *IMA Journal of Numerical Analysis*, 34(3):879–903, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/879>.

Cao:2024:NSO

- [518] Jiachuan Cao, Buyang Li, and Yanping Lin. A new second-order low-regularity integrator for the cubic nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 44(3):1313–1345, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1313/7109227>.

Cao:1997:HBM

- [519] Thang Cao. Hierarchical basis methods for hypersingular integral equations. *IMA Journal of Numerical Analysis*, 17(4):603–619, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170603.sgm.abs.html.

Cao:2019:CMF

- [520] X. Cao, S. F. Nemaadjieu, and I. S. Pop. Convergence of an MPFA finite

volume scheme for a two-phase porous media flow model with dynamic capillarity. *IMA Journal of Numerical Analysis*, 39(1):512–544, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/512/4826975>.

Cao:2025:MLT

- [521] Yanzhao Cao, Thi-Thao-Phuong Hoang, and Phuoc-Toan Huynh. Monolithic and local time-stepping decoupled algorithms for transport problems in fractured porous media. *IMA Journal of Numerical Analysis*, 45(1):283–328, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/283/7638783>.

Cao:2018:FEA

- [522] Yanzhao Cao, Jialin Hong, and Zhihui Liu. Finite element approximations for second-order stochastic differential equation driven by fractional Brownian motion. *IMA Journal of Numerical Analysis*, 38(1):184–197, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/184/3062450>.

Cardenal:1998:SSQ

- [523] Jesús Cardenal, Iain S. Duff, and José M. Jiménez. Solution of sparse quasi-square rectangular systems by Gaussian elimination. *IMA Journal of Numerical Analysis*, 18(2):165–177, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://www3.oup.com/imajna/article/18/2/165/1998>.

oup.co.uk/imanum/hdb/Volume_18/Issue_02/180165.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180165.pdf.

Cardenas:2024:HOU

- [524] Juan Manuel Cárdenas and Manuel Solano. A high order unfitted hybridizable discontinuous Galerkin method for linear elasticity. *IMA Journal of Numerical Analysis*, 44(2):945–979, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/945/7176048>.

Carr:1995:NAM

- [525] J. Carr, D. B. Duncan, and C. H. Walshaw. Numerical approximation of a metastable system. *IMA Journal of Numerical Analysis*, 15(4):505–521, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Carstensen:2016:BAE

- [526] C. Carstensen, D. Gallistl, and M. Schedensack. L^2 best approximation of the elastic stress in the Arnold–Winther FEM. *IMA Journal of Numerical Analysis*, 36(3):1096–1119, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1096>.

Carstensen:2017:NFO

- [527] C. Carstensen and K. Köhler. Nonconforming FEM for the obstacle problem. *IMA Journal of Numerical Analysis*, 37(1):64–93, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

URL <https://academic.oup.com/imajna/article/37/1/64/2669937/Nonconforming-FEM-for-the-obstacle-problem>.

Carstensen:2015:MAC

- [528] C. Carstensen and M. Schedensack. Medius analysis and comparison results for first-order finite element methods in linear elasticity. *IMA Journal of Numerical Analysis*, 35(4):1591–1621, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1591>.

Carstensen:2008:CAF

- [529] Carsten Carstensen. Convergence of an adaptive FEM for a class of degenerate convex minimization problems. *IMA Journal of Numerical Analysis*, 28(3):423–439, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/423>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/423>.

Carstensen:2000:CMF

- [530] Carsten Carstensen and Stefan A. Funken. Coupling of mixed finite elements and boundary elements. *IMA Journal of Numerical Analysis*, 20(3):461–480, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200461.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200461.pdf.

Carstensen:2019:PPE

- [531] Carsten Carstensen, Gouranga Mallik, and Neela Nataraj. A priori and a posteriori error control of discontinuous Galerkin finite element methods for the von Kármán equations. *IMA Journal of Numerical Analysis*, 39(1):167–200, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/167/4904161>.

Carstensen:2021:NFE

- [532] Carsten Carstensen, Gouranga Mallik, and Neela Nataraj. Nonconforming finite element discretization for semilinear problems with trilinear nonlinearity. *IMA Journal of Numerical Analysis*, 41(1):164–205, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/164/5823968>.

Carstensen:2016:CRU

- [533] Carsten Carstensen, Neela Nataraj, and Amiya K. Pani. Comparison results and unified analysis for first-order finite volume element methods for a Poisson model problem. *IMA Journal of Numerical Analysis*, 36(3):1120–1142, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1120>.

Carstensen:1997:SBE

- [534] Carsten Carstensen and Peter Wriggers. On the symmetric boundary element method and the symmetric coupling of boundary elements

and finite elements. *IMA Journal of Numerical Analysis*, 17(2):201–238, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170201.sgm.abs.html.

Carter:2007:SEE

- [535] Rebecca Carter and Michael B. Giles. Sharp error estimates for discretizations of the 1D convection–diffusion equation with Dirac initial data. *IMA Journal of Numerical Analysis*, 27(2):406–425, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/406>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/406>.

Cartis:2012:ACR

- [536] C. Cartis, N. I. M. Gould, and Ph. L. Toint. An adaptive cubic regularization algorithm for nonconvex optimization with convex constraints and its function-evaluation complexity. *IMA Journal of Numerical Analysis*, 32(4):1662–1695, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1662.full.pdf+html>.

Carvalhoes:2013:SIN

- [537] Claudio G. Carvalhoes. Spline interpolation on nonunisolvent sets. *IMA Journal of Numerical Analysis*, 33(1):370–375, January 2013. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/370.full.pdf+html>.

Casas:2023:EEN

- [538] Eduardo Casas, Karl Kunisch, and Mariano Mateos. Error estimates for the numerical approximation of optimal control problems with nonsmooth pointwise-integral control constraints. *IMA Journal of Numerical Analysis*, 43(3):1485–1518, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1485/6628874>.

Cascavita:2020:HHO

- [539] Karol L. Cascavita, Franz Chouly, and Alexandre Ern. Hybrid high-order discretizations combined with Nitsche’s method for Dirichlet and Signorini boundary conditions. *IMA Journal of Numerical Analysis*, 40(4):2189–2226, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2189/5618689>.

Cascon:2012:QCA

- [540] J. Manuel Cascón and Ricardo H. Nochetto. Quasioptimal cardinality of Afem driven by nonresidual estimators. *IMA Journal of Numerical Analysis*, 32(1):1–29, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/1.full.pdf+html>.

Cash:1982:MIR

- [541] J. R. Cash and A. Singhal. Monopimplicit Runge–Kutta formulae for the numerical integration of stiff differential systems. *IMA Journal of Numerical Analysis*, 2(2):211–227, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

CastanonQuiroz:2023:HHO

- [542] Daniel Castanon Quiroz, Daniele A. Di Pietro, and André Harnist. A Hybrid High-Order method for incompressible flows of non-Newtonian fluids with power-like convective behaviour. *IMA Journal of Numerical Analysis*, 43(1):144–186, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/144/6456262>.

Castro:2008:NAB

- [543] Carlos Castro, Sorin Micu, and Arnaud Münch. Numerical approximation of the boundary control for the wave equation with mixed finite elements in a square. *IMA Journal of Numerical Analysis*, 28(1):186–214, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/186>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/186>.

Caucao:2016:PPE

- [544] Sergio Caucao, David Mora, and Ricardo Oyarzúa. A priori and a posteriori error analysis of a pseudostress-based mixed formulation of the Stokes problem with

varying density. *IMA Journal of Numerical Analysis*, 36(2):947–983, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/947>.

Caucao:2021:BSM

- [545] Sergio Caucao and Ivan Yotov. A Banach space mixed formulation for the unsteady Brinkman–Forchheimer equations. *IMA Journal of Numerical Analysis*, 41(4):2708–2743, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2708/5893595>.

Caussignac:1988:LCN

- [546] Ph. Caussignac and R. Touzani. Linear conforming and nonconforming upwind finite elements for the convection-diffusion equation. *IMA Journal of Numerical Analysis*, 8(1):85–103, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cautres:2004:LDD

- [547] René Cautrès, Raphaële Herbin, and Florence Hubert. The Lions domain decomposition algorithm on non-matching cell-centred finite volume meshes. *IMA Journal of Numerical Analysis*, 24(3):465–490, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240465.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240465.pdf.

Cazenave:1998:IFD

- [548] Thierry Cazenave and Flávio Dickstein. Implicit finite difference schemes for a linear model of well-reservoir coupling. *IMA Journal of Numerical Analysis*, 18(1):91–120, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180091.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180091.pdf.

Celis:2018:PBA

- [549] Oliver Salazar Celis. A parametrized barycentric approximation for inverse problems with application to the Black–Scholes formula. *IMA Journal of Numerical Analysis*, 38(2):976–997, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/976/3836903>.

Celledoni:2001:MAM

- [550] Elena Celledoni and Arieh Iserles. Methods for the approximation of the matrix exponential in a Lie-algebraic setting. *IMA Journal of Numerical Analysis*, 21(2):463–488, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210463abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210463.pdf.

Cen:2024:HNN

- [551] Siyu Cen, Bangti Jin, Qimeng Quan, and Zhi Zhou. Hybrid neural-network

FEM approximation of diffusion coefficient in elliptic and parabolic problems. *IMA Journal of Numerical Analysis*, 44(5):3059–3093, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/3059/7276579>.

Cermak:2011:SAP

- [552] Jan Cermák. The stability and asymptotic properties of the Θ -methods for the pantograph equation. *IMA Journal of Numerical Analysis*, 31(4):1533–1551, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1533.full.pdf+html>.

Chadha:2011:RGE

- [553] Naresh M. Chadha and Natalia Kopteva. A robust grid equidistribution method for a one-dimensional singularly perturbed semilinear reaction-diffusion problem. *IMA Journal of Numerical Analysis*, 31(1):188–211, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/188.full.pdf+html>.

Chainais-Hillairet:2011:FVS

- [554] Claire Chainais-Hillairet and Jérôme Droniou. Finite-volume schemes for noncoercive elliptic problems with Neumann boundary conditions. *IMA Journal of Numerical Analysis*, 31(1):61–85, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/61.full.pdf+html>.

[oxfordjournals.org/content/31/1/61.full.pdf+html](http://imajna.oxfordjournals.org/content/31/1/61.full.pdf+html).

Chainais-Hillairet:2007:ABF

- [555] Claire Chainais-Hillairet and Francis Filbet. Asymptotic behaviour of a finite-volume scheme for the transient drift-diffusion model. *IMA Journal of Numerical Analysis*, 27(4):689–716, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/689>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/689>.

Chainais-Hillairet:2020:LTB

- [556] Claire Chainais-Hillairet and Maxime Herda. Large-time behaviour of a family of finite volume schemes for boundary-driven convection-diffusion equations. *IMA Journal of Numerical Analysis*, 40(4):2473–2504, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2473/5621367>.

Chainais-Hillairet:2003:CFV

- [557] Claire Chainais-Hillairet and Yue-Jun Peng. Convergence of a finite-volume scheme for the drift-diffusion equations in 1D. *IMA Journal of Numerical Analysis*, 23(1):81–108, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230081.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230081.pdf.

Chalabi:1992:SUS

- [558] A. Chalabi. Stable upwind schemes for hyperbolic conservation laws with source terms. *IMA Journal of Numerical Analysis*, 12(2):217–241, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Challis:1982:NMC

- [559] N. V. Challis and D. M. Burley. A numerical method for conformal mapping. *IMA Journal of Numerical Analysis*, 2(2):169–181, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chamberlain:1988:FLL

- [560] R. M. Chamberlain and M. J. D. Powell. QR factorization for linear least-squares problems on a hypercube multiprocessor. *IMA Journal of Numerical Analysis*, 8(4):401–413, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chan:1991:TPT

- [561] Raymond H. Chan. Toeplitz preconditioners for Toeplitz systems with non-negative generating functions. *IMA Journal of Numerical Analysis*, 11(3):333–345, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chan:2001:STP

- [562] Raymond H. Chan, Michael K. Ng, and Xiao-Qing Jin. Strang-type preconditioners for systems of L.M.F.-based O.D.E. codes. *IMA Journal of Numerical Analysis*, 21(2):451–462, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-

3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210451.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210451.pdf.

Chandler:1987:UCG

- [563] G. A. Chandler and I. G. Graham. Uniform convergence of Galerkin solutions to noncompact integral operator equations. *IMA Journal of Numerical Analysis*, 7(3):327–334, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chandler-Wilde:1993:SUS

- [564] S. N. Chandler-Wilde. Some uniform stability and convergence results for integral equations on the real line and projection methods for their solution. *IMA Journal of Numerical Analysis*, 13(4):509–535, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chandler-Wilde:1989:AGT

- [565] S. N. Chandler-Wilde and M. J. C. Gover. On the application of a generalization of Toeplitz matrices to the numerical solution of integral equations with weakly singular convolution kernels. *IMA Journal of Numerical Analysis*, 9(4):525–544, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chang:1996:NPA

- [566] Xiao-Wen Chang, Christopher C. Paige, and G. W. Stewart. New perturbation analyses for the Cholesky factorization. *IMA Journal of Numerical Analysis*, 16(4):457–484, October 1996. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160457.sgm.abs.html.

Chapko:2000:NSH

- [567] Roman Chapko, Rainer Kress, and Lars Monch. On the numerical solution of a hypersingular integral equation for elastic scattering from a planar crack. *IMA Journal of Numerical Analysis*, 20(4):601–619, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200601.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200601.pdf.

Chappell:2011:CQG

- [568] David J. Chappell. Convolution quadrature Galerkin boundary element method for the wave equation with reduced quadrature weight computation. *IMA Journal of Numerical Analysis*, 31(2):640–666, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/640.full.pdf+html>.

Charbonneau:2010:WCP

- [569] Benoit Charbonneau, Yuriy Svyrydov, and P. F. Tupper. Weak convergence in the Prokhorov metric of methods for stochastic differential equations. *IMA Journal of Numerical Analysis*, 30(2):579–594, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/579>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/579>.

<http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/579>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/579>.

Chartier:2022:DFH

- [570] Philippe Chartier, Mohammed Lemou, Florian Méhats, and Xiaofei Zhao. Derivative-free high-order uniformly accurate schemes for highly oscillatory systems. *IMA Journal of Numerical Analysis*, 42(2):1623–1644, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1623/6260882>.

Chartier:2007:PFI

- [571] Philippe Chartier and Ander Murua. Preserving first integrals and volume forms of additively split systems. *IMA Journal of Numerical Analysis*, 27(2):381–405, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/381>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/381>.

Chassagneux:2023:LSS

- [572] Jean-François Chassagneux, Junchao Chen, Noufel Frikha, and Chao Zhou. A learning scheme by sparse grids and Picard approximations for semi-linear parabolic PDEs. *IMA Journal of Numerical Analysis*, 43(5):3109–3168, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/3109/6795270>.

Chatterjee:2020:CFV

- [573] N. Chatterjee and U. S. Fjordholm. A convergent finite volume method for the Kuramoto equation and related nonlocal conservation laws. *IMA Journal of Numerical Analysis*, 40(1):405–421, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/405/5162417>.

Chau:2018:WBS

- [574] Ki Wai Chau and Cornelis W. Oosterlee. On the wavelet-based SWIFT method for backward stochastic differential equations. *IMA Journal of Numerical Analysis*, 38(2):1051–1083, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/1051/3947812>.

Chaumont-Frelet:2025:EEM

- [575] T. Chaumont-Frelet. An equilibrated estimator for mixed finite element discretizations of the curl-curl problem. *IMA Journal of Numerical Analysis*, 45(1):329–353, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/329/7675402>.

Chaumont-Frelet:2020:WEC

- [576] T. Chaumont-Frelet and S. Nicaise. Wavenumber explicit convergence analysis for finite element discretizations of general wave propagation problems. *IMA Journal of Numerical Analysis*, 40(2):1503–1543, April 2020. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1503/5487770>.

Chavez:2012:DDS

- [577] Joseph Páez Chávez. Discretizing dynamical systems with Hopf–Hopf bifurcations. *IMA Journal of Numerical Analysis*, 32(1):185–201, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/185.full.pdf+html>.

Chawla:1983:NFO

- [578] M. M. Chawla. A new fourth-order finite-difference method for computing eigenvalues of fourth-order two-point boundary value problems. *IMA Journal of Numerical Analysis*, 3(3):291–293, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chawla:1984:FDM

- [579] M. M. Chawla and C. P. Katti. A finite-difference method for a class of singular two-point boundary value problems. *IMA Journal of Numerical Analysis*, 4(4):457–466, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chawla:1985:HAS

- [580] M. M. Chawla and P. S. Rao. High-accuracy P -stable methods for $y'' = f(t, y)$. *IMA Journal of Numerical Analysis*, 5(2):215–220, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See corrigendum [581].

Chawla:1986:CHA

- [581] M. M. Chawla and P. S. Rao. Corrigendum: “High-accuracy P -stable methods for $y'' = f(t, y)$ ” [IMA J. Numer. Anal. **5** (1985), no. 2, 215–220; MR 87c:65078]. *IMA Journal of Numerical Analysis*, 6(2):252, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See [580].

Chegini:2012:ATP

- [582] Nabi Chegini and Rob Stevenson. The adaptive tensor product wavelet scheme: sparse matrices and the application to singularly perturbed problems. *IMA Journal of Numerical Analysis*, 32(1):75–104, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/75.full.pdf+html>.

Chen:2012:MCA

- [583] Caihua Chen, Bingsheng He, and Xiaoming Yuan. Matrix completion via an alternating direction method. *IMA Journal of Numerical Analysis*, 32(1):227–245, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/227.full.pdf+html>.

Chen:2023:EID

- [584] Cairong Chen, Dongmei Yu, and Deren Han. Exact and inexact Douglas–Rachford splitting methods for solving large-scale sparse absolute value equations. *IMA Journal of Numerical Analysis*, 43(2):1036–1060, March 2023.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/1036/6526317>.

Chen:1989:EEO

- [585] Chuan Miao Chen, Stig Larsson, and Nai Ying Zhang. Error estimates of optimal order for finite element methods with interpolated coefficients for the nonlinear heat equation. *IMA Journal of Numerical Analysis*, 9(4):507–524, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chen:2023:AEI

- [586] Chuchu Chen, Jianbo Cui, Jialin Hong, and Derui Sheng. Accelerated exponential Euler scheme for stochastic heat equation: convergence rate of the density. *IMA Journal of Numerical Analysis*, 43(2):1181–1220, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/1181/6567223>.

Chen:2025:SCA

- [587] Chuchu Chen, Tonghe Dang, and Jialin Hong. Strong convergence of adaptive time-stepping schemes for the stochastic Allen–Cahn equation. *IMA Journal of Numerical Analysis*, 45(1):404–450, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/404/7664606>.

Chen:2025:SME

- [588] Chuchu Chen, Jialin Hong, and Chuying Huang. Stochastic modified equations for symplectic methods applied

to rough Hamiltonian systems. *IMA Journal of Numerical Analysis*, 45(2):894–933, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/894/7676802>.

Chen:2017:MSC

- [589] Chuchu Chen, Jialin Hong, and Lihai Ji. Mean-square convergence of a symplectic local discontinuous Galerkin method applied to stochastic linear Schrödinger equation. *IMA Journal of Numerical Analysis*, 37(2):1041–1065, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/1041/2669981/Mean-square-convergence-of-a-symplectic-local>.

Chen:2020:EEH

- [590] Gang Chen and Jintao Cui. On the error estimates of a hybridizable discontinuous Galerkin method for second-order elliptic problem with discontinuous coefficients. *IMA Journal of Numerical Analysis*, 40(2):1577–1600, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1577/5305590>.

Chen:2021:AIP

- [591] Gang Chen, Weifeng Qiu, and Liwei Xu. Analysis of an interior penalty DG method for the quad-curl problem. *IMA Journal of Numerical Analysis*, 41(4):2990–3023, October 2021. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2990/5891958>.

Chen:2017:LFE

- [592] Hongtao Chen, Hailong Guo, Zhimin Zhang, and Qingsong Zou. A C^0 linear finite element method for two fourth-order eigenvalue problems. *IMA Journal of Numerical Analysis*, 37(4):2120–2138, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2120/2422320>.

Chen:2021:BEE

- [593] Hu Chen and Martin Stynes. Blow-up of error estimates in time-fractional initial-boundary value problems. *IMA Journal of Numerical Analysis*, 41(2):974–997, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/974/5843621>.

Chen:2016:RPE

- [594] Huangxin Chen, Jingzhi Li, and Weifeng Qiu. Robust a posteriori error estimates for HDG method for convection–diffusion equations. *IMA Journal of Numerical Analysis*, 36(1):437–462, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/437>.

Chen:2011:NSC

- [595] Jinhai Chen and Matthias Gerdt. Numerical solution of control-state constrained optimal control problems

with an inexact smoothing Newton method. *IMA Journal of Numerical Analysis*, 31(4):1598–1624, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1598.full.pdf+html>.

Chen:2004:AIQ

- [596] Journal Shaochun Chen, Dongyang Shi, and Yongcheng Zhao. Anisotropic interpolation and quasi-Wilson element for narrow quadrilateral meshes. *IMA Journal of Numerical Analysis*, 24(1):77–95, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240077.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240077.pdf.

Chen:1993:NAB

- [597] Ke Chen and S. Amini. Numerical analysis of boundary integral solution of the Helmholtz equation in domains with nonsmooth boundaries. *IMA Journal of Numerical Analysis*, 13(1):43–66, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chen:2006:TLS

- [598] Ke Chen and Martyn D. Hughes. A two-level sparse approximate inverse preconditioner for unsymmetric matrices. *IMA Journal of Numerical Analysis*, 26(1):11–24, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/11>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/11>.

[oxfordjournals.org/cgi/reprint/26/1/11](http://imanum.oxfordjournals.org/cgi/reprint/26/1/11).

Chen:2004:SUM

- [599] Mayru Chen and Ming-Chia Li. Stability of uniformly Morse–Smale gradient-like numerical methods for flows. *IMA Journal of Numerical Analysis*, 24(4):577–585, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/577>; <http://imanum.oupjournals.org/cgi/reprint/24/4/577>.

Chen:2021:SEE

- [600] Minghua Chen, Wenya Qi, Jiankang Shi, and Jiming Wu. A sharp error estimate of piecewise polynomial collocation for nonlocal problems with weakly singular kernels. *IMA Journal of Numerical Analysis*, 41(4):3145–3174, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/3145/5894150>.

Chen:2022:LOF

- [601] Sheng Chen and Jie Shen. Log orthogonal functions: approximation properties and applications. *IMA Journal of Numerical Analysis*, 42(1):712–743, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/712/6041854>.

Chen:2016:WGM

- [602] Wenbin Chen, Fang Wang, and Yanqiu Wang. Weak Galerkin method for the

coupled Darcy–Stokes flow. *IMA Journal of Numerical Analysis*, 36(2):897–921, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/897>.

Chen:2022:EED

- [603] Wenbin Chen, Shufen Wang, Yichao Zhang, Daozhi Han, Cheng Wang, and Xiaoming Wang. Error estimate of a decoupled numerical scheme for the Cahn–Hilliard–Stokes–Darcy system. *IMA Journal of Numerical Analysis*, 42(3):2621–2655, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2621/6307434>.

Chen:2012:CEB

- [604] Xiaojun Chen and Zhengyu Wang. Computational error bounds for a differential linear variational inequality. *IMA Journal of Numerical Analysis*, 32(3):957–982, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/957.full.pdf+html>.

Chen:2024:ESI

- [605] Xingyuan Chen and Gonalo dos Reis. Euler simulation of interacting particle systems and McKean–Vlasov SDEs with fully super-linear growth drifts in space and interaction. *IMA Journal of Numerical Analysis*, 44(2):751–796, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/751/7158522>.

[oup.com/imajna/article/44/2/751/7158522](http://academic.oup.com/imajna/article/44/2/751/7158522).

Chen:2012:AVD

- [606] Yanlai Chen and Bernardo Cockburn. Analysis of variable-degree Hdg methods for convection-diffusion equations. Part I: general nonconforming meshes. *IMA Journal of Numerical Analysis*, 32(4):1267–1293, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1267.full.pdf+html>.

Chen:2016:NDG

- [607] Yanlai Chen, Bernardo Cockburn, and Bo Dong. A new discontinuous Galerkin method, conserving the discrete H^2 -norm, for third-order linear equations in one space dimension. *IMA Journal of Numerical Analysis*, 36(4):1570–1598, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1570>.

Chen:2024:ACS

- [608] Yiwen Chen and Warren Hare. Adapting the centred simplex gradient to compensate for misaligned sample points. *IMA Journal of Numerical Analysis*, 44(3):1821–1861, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1821/7225158>.

Chen:2014:AMM

- [609] Yung-Wei Chen, Chun-Ming Chang, Chein-Shan Liu, and Jiang-Ren Chang.

Application of a modified manifold-based exponentially convergent algorithm to solve elliptic boundary-value problems. *IMA Journal of Numerical Analysis*, 34(1):362–389, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/362.full.pdf+html>.

Chen:1994:EEF

- [610] Zhi Ming Chen and K.-H. Hoffmann. An error estimate for a finite-element scheme for a phase field model. *IMA Journal of Numerical Analysis*, 14(2):243–255, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chen:2000:NMS

- [611] Zhiming Chen, Tsimin Shih, and Xingye Yue. Numerical methods for Stefan problems with prescribed convection and nonlinear flux. *IMA Journal of Numerical Analysis*, 20(1):81–98, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200081.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200081.pdf.

Chen:2022:LSP

- [612] Zhongwen Chen, Yu-Hong Dai, and Taoyou Zhang. A line search penalty-free SQP method for equality-constrained optimization without Maratos effect. *IMA Journal of Numerical Analysis*, 42(4):3771–3802, October 2022. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3771/6501117>.

Cheng:2009:DFN

- [613] Wanyou Cheng and Dong-Hui Li. A derivative-free nonmonotone line search and its application to the spectral residual method. *IMA Journal of Numerical Analysis*, 29(3):814–825, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/814>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/814>.

Chernih:2014:MMC

- [614] A. Chernih and Q. T. Le Gia. Multiscale methods with compactly supported radial basis functions for Galerkin approximation of elliptic PDEs. *IMA Journal of Numerical Analysis*, 34(2):569–591, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/569.full.pdf+html>.

Chernov:2019:HVE

- [615] Alexey Chernov and Lorenzo Mascotto. The harmonic virtual element method: stabilization and exponential convergence for the Laplace problem on polygonal domains. *IMA Journal of Numerical Analysis*, 39(4):1787–1817, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1787/5038894>.

Cheung:2001:FEA

- [616] C. W. Cheung and C.-H. Lai. On a flexible elimination algorithm with applications to panel element equations. *IMA Journal of Numerical Analysis*, 21(2):603–619, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210603.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210603.pdf.

Cheung:2015:SAC

- [617] Dennis Cheung and Felipe Cucker. Smoothed analysis of component-wise condition numbers for sparse matrices. *IMA Journal of Numerical Analysis*, 35(1):74–88, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/74>.

Chiang:1994:POS

- [618] Yi-Ling F. Chiang. Properties of optimal schemes for linear 1D PDE initial value hyperbolic problems with variable coefficients. *IMA Journal of Numerical Analysis*, 14(2):211–232, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chien:1997:DGM

- [619] David Da-Kwun Chien and Kendall Atkinson. A discrete Galerkin method for a hypersingular boundary integral equation. *IMA Journal of Numerical Analysis*, 17(3):463–478, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170463.sgm.abs.html.

[oup.co.uk/imanum/hdb/Volume_17/Issue_03/170463.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170463.sgm.abs.html).

Chin:2011:MPO

- [620] Siu A. Chin and Jürgen Geiser. Multi-product operator splitting as a general method of solving autonomous and nonautonomous equations. *IMA Journal of Numerical Analysis*, 31(4):1552–1577, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1552.full.pdf+html>.

Cho:2020:BPI

- [621] Durkbin Cho and Rafael Vázquez. BPX preconditioners for isogeometric analysis using analysis-suitable T-splines. *IMA Journal of Numerical Analysis*, 40(1):764–799, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/764/5036562>.

Choquet:2011:AFV

- [622] Catherine Choquet and Sébastien Zimmermann. Analysis of a finite-volume–finite-element scheme for a nuclear transport model. *IMA Journal of Numerical Analysis*, 31(1):86–115, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/86.full.pdf+html>.

Chouly:2018:RBP

- [623] Franz Chouly, Mathieu Fabre, Patrick Hild, Jérôme Pousin, and Yves Renard. Residual-based a posteriori error estimation for contact problems ap-

proximated by Nitsche's method. *IMA Journal of Numerical Analysis*, 38(2): 921–954, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/921/3871418>.

Chowdhury:2025:PEB

- [624] Indranil Chowdhury and Espen R. Jakobsen. Precise error bounds for numerical approximations of fractional HJB equations. *IMA Journal of Numerical Analysis*, 45(2):633–672, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/633/7691186>.

Christiansen:2024:DCR

- [625] Snorre H. Christiansen. On the definition of curvature in Regge calculus. *IMA Journal of Numerical Analysis*, 44(5):2698–2715, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2698/7502804>.

Christiansen:2011:DMK

- [626] Snorre H. Christiansen and Tore Gunnar Halvorsen. Discretizing the Maxwell–Klein–Gordon equation by the lattice gauge theory formalism. *IMA Journal of Numerical Analysis*, 31(1):1–24, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/1.full.pdf+html>.

Christiansen:2013:VEA

- [627] Snorre H. Christiansen and Ragnar Winther. On variational eigenvalue approximation of semidefinite operators. *IMA Journal of Numerical Analysis*, 33(1):164–189, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/164.full.pdf+html>.

Christianson:1992:AHR

- [628] Bruce Christianson. Automatic Hessians by reverse accumulation. *IMA Journal of Numerical Analysis*, 12(2): 135–150, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Christie:1981:PAN

- [629] I. Christie, D. F. Griffiths, A. R. Mitchell, and J. M. Sanz-Serna. Product approximation for nonlinear problems in the finite element method. *IMA Journal of Numerical Analysis*, 1(3):253–266, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Christie:1991:ERS

- [630] I. Christie and C. Palencia. An exact Riemann solver for a fluidized bed model. *IMA Journal of Numerical Analysis*, 11(4):493–508, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chu:1990:SAI

- [631] Moody T. Chu. Solving additive inverse eigenvalue problems for symmetric matrices by the homotopy method.

IMA Journal of Numerical Analysis, 10(3):331–342, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chu:2024:LDC

- [632] Moody T. Chu. Lax dynamics for Cartan decomposition with applications to Hamiltonian simulation. *IMA Journal of Numerical Analysis*, 44(3):1406–1434, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1406/7136026>.

Chu:2015:FRF

- [633] Moody T. Chu and Matthew M. Lin. On the finite rank and finite-dimensional representation of bounded semi-infinite Hankel operators. *IMA Journal of Numerical Analysis*, 35(3):1256–1276, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1256>.

Chu:1995:ETP

- [634] Moody T. Chu and Joel W. Wright. The educational testing problem revisited. *IMA Journal of Numerical Analysis*, 15(1):141–160, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chu:2018:HDF

- [635] Van Tiep Chu and Viet Ha Hoang. High-dimensional finite elements for multiscale Maxwell-type equations. *IMA Journal of Numerical Analysis*, 38(1):227–270, January 25, 2018.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/227/3063754>.

Chung:2012:SDG

- [636] Eric T. Chung and Chak Shing Lee. A staggered discontinuous Galerkin method for the curl-curl operator. *IMA Journal of Numerical Analysis*, 32(3):1241–1265, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1241.full.pdf+html>.

Cifani:2011:DGM

- [637] Simone Cifani, Espen R. Jakobsen, and Kenneth H. Karlsen. The discontinuous Galerkin method for fractal conservation laws. *IMA Journal of Numerical Analysis*, 31(3):1090–1122, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1090.full.pdf+html>.

Cimrak:2005:EES

- [638] Ivan Cimrak. Error estimates for a semi-implicit numerical scheme solving the Landau–Lifshitz equation with an exchange field. *IMA Journal of Numerical Analysis*, 25(3):611–634, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/611>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/611>.

Claeys:2023:NIG

- [639] X. Claeys. Nonselfadjoint impedance in Generalized Optimized Schwarz Methods. *IMA Journal of Numerical Analysis*, 43(5):3026–3054, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/3026/6768221>.

Clark:1988:LRI

- [640] D. I. Clark and M. R. Osborne. On linear restricted and interval least-squares problems. *IMA Journal of Numerical Analysis*, 8(1):23–36, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Clavero:2006:UCA

- [641] C. Clavero, J. L. Gracia, and J. C. Jorge. A uniformly convergent alternating direction HODIE finite difference scheme for 2D time-dependent convection–diffusion problems. *IMA Journal of Numerical Analysis*, 26(1):155–172, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/155>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/155>.

Clavero:2000:ADS

- [642] C. Clavero, J. C. Jorge, F. Lisbona, and G. I. Shishkin. An alternating direction scheme on a nonuniform mesh for reaction-diffusion parabolic problems. *IMA Journal of Numerical Analysis*, 20(2):263–280, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200263.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200263.pdf.

Clenshaw:1988:SLI

- [643] C. W. Clenshaw and P. R. Turner. The symmetric level-index system. *IMA Journal of Numerical Analysis*, 8(4):517–526, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Coatleven:2024:USS

- [644] Julien Coatleven. Unconditionally stable small stencil enriched multiple point flux approximations of heterogeneous diffusion problems on general meshes. *IMA Journal of Numerical Analysis*, 44(6):3435–3481, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3435/7450352>.

Cockburn:2014:MHM

- [645] B. Cockburn, O. Dubois, J. Gopalakrishnan, and S. Tan. Multigrid for an HDG method. *IMA Journal of Numerical Analysis*, 34(4):1386–1425, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1386>.

Cockburn:2018:DSH

- [646] Bernardo Cockburn and Guosheng Fu. Devising superconvergent HDG methods with symmetric approximate stresses for linear elasticity by M -decompositions. *IMA Journal of Numerical Analysis*, 38(2):566–604, April

18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/566/3861276>.

Cockburn:2017:NDS

- [647] Bernardo Cockburn, Guosheng Fu, and Weifeng Qiu. A note on the devising of superconvergent HDG methods for Stokes flow by M -decompositions. *IMA Journal of Numerical Analysis*, 37(2):730–749, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/730/2669997/A-note-on-the-devising-of-superconvergent-HDG>.

Cockburn:2012:DSC

- [648] Bernardo Cockburn and Francisco-Javier Sayas. The devising of symmetric couplings of boundary element and discontinuous Galerkin methods. *IMA Journal of Numerical Analysis*, 32(3):765–794, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/765.full.pdf+html>.

Cockburn:2022:EPE

- [649] Bernardo Cockburn and Shiqiang Xia. An *a priori* error analysis of adjoint-based super-convergent Galerkin approximations of linear functionals. *IMA Journal of Numerical Analysis*, 42(2):1050–1086, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1050/6104058>.

Coclite:2008:NSC

- [650] G. M. Coclite, K. H. Karlsen, and N. H. Risebro. Numerical schemes for computing discontinuous solutions of the Degasperis–Procesi equation. *IMA Journal of Numerical Analysis*, 28(1):80–105, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/80>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/80>.

Cocozza-Thivent:2006:FVS

- [651] C. Cocozza-Thivent, R. Eymard, and S. Mercier. A finite-volume scheme for dynamic reliability models. *IMA Journal of Numerical Analysis*, 26(3):446–471, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/446>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/446>.

Cocozza-Thivent:2017:NMP

- [652] Christiane Cocozza-Thivent, Robert Eymard, Ludovic Goudenège, and Michel Roussignol. Numerical methods for piecewise deterministic Markov processes with boundary. *IMA Journal of Numerical Analysis*, 37(1):170–208, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/170/2884282/Numerical-methods-for-piecewise-deterministic>.

Codenotti:1989:NQI

- [653] B. Codenotti and F. Romani. A note on quadrant interlocking factorization. *IMA Journal of Numerical Analysis*, 9(2):139–143, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cohen:2016:KWU

- [654] Albert Cohen and Ronald DeVore. Kolmogorov widths under holomorphic mappings. *IMA Journal of Numerical Analysis*, 36(1):1–12, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/1>.

Cohen:2006:CPN

- [655] David Cohen. Conservation properties of numerical integrators for highly oscillatory Hamiltonian systems. *IMA Journal of Numerical Analysis*, 26(1):34–59, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/34>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/34>.

Cohen:2016:FDA

- [656] David Cohen and Lluís Quer-Sardanyons. A fully discrete approximation of the one-dimensional stochastic wave equation. *IMA Journal of Numerical Analysis*, 36(1):400–420, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/400>.

imajna.oxfordjournals.org/content/36/1/400.

Colbrook:2020:EUT

- [657] Matthew J. Colbrook. Extending the unified transform: curvilinear polygons and variable coefficient PDEs. *IMA Journal of Numerical Analysis*, 40(2):976–1004, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/976/5210368>.

Coleman:1989:ENM

- [658] John P. Coleman. Errata for: “Numerical methods for $y'' = f(x, y)$ via rational approximations for the cosine” [IMA J. Numer. Anal. **9** (1989), no. 2, 145–165; MR 90i:65130]. *IMA Journal of Numerical Analysis*, 9(4):i, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See [659].

Coleman:1989:NMR

- [659] John P. Coleman. Numerical methods for $y'' = f(x, y)$ via rational approximations for the cosine. *IMA Journal of Numerical Analysis*, 9(2):145–165, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See errata [658].

Coleman:2003:OCC

- [660] John P. Coleman. Order conditions for a class of two-step methods for $y' = f(x, y)$. *IMA Journal of Numerical Analysis*, 23(2):197–220, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/.

Issue_02/230197.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230197.pdf.

Coleman:1996:SEF

- [661] John P. Coleman and Liviu Gr. Ixaru. P -stability and exponential-fitting methods for $y' = f(x, y)$. *IMA Journal of Numerical Analysis*, 16(2):179–199, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160179.sgm.abs.html.

Colombini:2015:NAV

- [662] F. Colombini and J. Rauch. Numerical analysis of very weakly well-posed hyperbolic Cauchy problems. *IMA Journal of Numerical Analysis*, 35(3):989–1010, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/989>.

Congreve:2025:EAL

- [663] Scott Congreve, Vít Dolejší, and Sunčica Sakić. Error analysis for local discontinuous Galerkin semidiscretization of Richards' equation. *IMA Journal of Numerical Analysis*, 45(1):580–630, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/580/7668414>.

Congreve:2013:DFG

- [664] Scott Congreve, Paul Houston, Endre Süli, and Thomas P. Wihler. Discontinuous Galerkin finite element approximation of quasilinear elliptic bound-

ary value problems II: strongly monotone quasi-Newtonian flows. *IMA Journal of Numerical Analysis*, 33(4):1386–1415, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1386.full.pdf+html>.

Conn:2008:GSS

- [665] Andrew R. Conn, Katya Scheinberg, and Luís N. Vicente. Geometry of sample sets in derivative-free optimization: polynomial regression and underdetermined interpolation. *IMA Journal of Numerical Analysis*, 28(4):721–748, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/721>.

Coope:1993:CIN

- [666] Ian D. Coope. Curve interpolation with nonlinear spiral splines. *IMA Journal of Numerical Analysis*, 13(3):327–341, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cooper:1984:GAS

- [667] G. J. Cooper. A generalization of algebraic stability for Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 4(4):427–440, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cooper:1986:ESA

- [668] G. J. Cooper. On the existence of solutions for algebraically stable Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 6(3):325–330, 1986.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cooper:1987:SRK

- [669] G. J. Cooper. Stability of Runge–Kutta methods for trajectory problems. *IMA Journal of Numerical Analysis*, 7(1):1–13, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cooper:1992:WNS

- [670] G. J. Cooper. Weak nonlinear stability of implicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 12(1):57–65, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cooper:1983:ISI

- [671] G. J. Cooper and J. C. Butcher. An iteration scheme for implicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 3(2):127–140, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Coppe:2022:ASA

- [672] Vincent Coppé and Daan Huybrechs. On the adaptive spectral approximation of functions using redundant sets and frames. *IMA Journal of Numerical Analysis*, 42(1):27–53, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/27/6125994>.

Coquel:2012:CTS

- [673] Frédéric Coquel, Marie Postel, and Quang-Huy Tran. Convergence of time-space adaptive algorithms for nonlinear conservation laws. *IMA Jour-*

nal of Numerical Analysis, 32(4):1440–1483, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1440.full.pdf+html>.

Coquereaux:1990:IMC

- [674] R. Coquereaux, A. Grossmann, and B. E. Lautrup. Iterative method for calculation of the Weierstrass elliptic function. *IMA Journal of Numerical Analysis*, 10(1):119–128, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Coughlan:2007:TLM

- [675] James J. Coughlan, Adrian T. Hill, and Hartmut Logemann. The \mathcal{Z} -transform and linear multistep stability. *IMA Journal of Numerical Analysis*, 27(1):45–73, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/45>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/45>.

Coulombel:2023:SSF

- [676] Jean-François Coulombel and Grégory Faye. Sharp stability for finite difference approximations of hyperbolic equations with boundary conditions. *IMA Journal of Numerical Analysis*, 43(1):187–224, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/187/6433423>.

Courtes:2020:EEF

- [677] Clémentine Courtès, Frédéric Lagoutière, and Frédéric Rousset. Error estimates of finite difference schemes for the Korteweg–de Vries equation. *IMA Journal of Numerical Analysis*, 40(1):628–685, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/628/5228663>.

Cox:1981:LSS

- [678] M. G. Cox. The least squares solution of overdetermined linear equations having band or augmented band structure. *IMA Journal of Numerical Analysis*, 1(1):3–22, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cox:1982:DVI

- [679] M. G. Cox. Direct versus iterative methods of solution for multivariate spline-fitting problems. *IMA Journal of Numerical Analysis*, 2(1):73–81, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cox:1991:ACB

- [680] M. G. Cox and P. M. Harris. The approximation of a composite Bézier cubic curve by a composite Bézier quadratic curve. *IMA Journal of Numerical Analysis*, 11(2):159–180, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cox:1985:LSS

- [681] M. G. Cox and P. E. Manneback. Least-squares spline regression with

block-diagonal variance matrices. *IMA Journal of Numerical Analysis*, 5(3):275–286, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cox:1989:ALS

- [682] Maurice G. Cox and Helen M. Jones. An algorithm for least-squares circle fitting to data with specified uncertainty ellipses. *IMA Journal of Numerical Analysis*, 9(3):285–298, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cox:2021:CHN

- [683] Sonja Cox, Martin Hutzenhaler, Arnulf Jentzen, Jan van Neerven, and Timo Welti. Convergence in Hölder norms with applications to Monte Carlo methods in infinite dimensions. *IMA Journal of Numerical Analysis*, 41(1):493–548, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/493/5831480>.

Cozma:2020:SOC

- [684] Andrei Cozma and Christoph Reisinger. Strong order 1/2 convergence of full truncation Euler approximations to the Cox–Ingersoll–Ross process. *IMA Journal of Numerical Analysis*, 40(1):358–376, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/358/5146428>.

Creuse:2013:PEE

- [685] Emmanuel Creusé and Serge Nicaise. A posteriori error estimator based

on gradient recovery by averaging for convection-diffusion-reaction problems approximated by discontinuous Galerkin methods. *IMA Journal of Numerical Analysis*, 33(1):212–241, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/212.full.pdf+html>.

Creuse:2025:GOE

- [686] Emmanuel Creusé, Serge Nicaise, and Zuqi Tang. Goal-oriented error estimation based on equilibrated flux reconstruction for the approximation of the harmonic formulations in eddy current problems. *IMA Journal of Numerical Analysis*, 45(1):126–162, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/126/7590342>.

Creuse:2017:GEE

- [687] Emmanuel Creusé, Serge Nicaise, and Roberta Tittarelli. A guaranteed equilibrated error estimator for the $\mathbf{A} - \varphi$ and $\mathbf{T} - \Omega$ magnetodynamic harmonic formulations of the Maxwell system. *IMA Journal of Numerical Analysis*, 37(2):750–773, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/750/2669988/A-guaranteed-equilibrated-error-estimator-for-the>.

Criscuolo:2014:NEC

- [688] G. Criscuolo. Numerical evaluation of certain strongly singular integrals. *IMA Journal of Numerical Analysis*, 34(2):651–674, April

2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/651.full.pdf+html>.

Croci:2023:ERN

- [689] M. Croci and M. B. Giles. Effects of round-to-nearest and stochastic rounding in the numerical solution of the heat equation in low precision. *IMA Journal of Numerical Analysis*, 43(3):1358–1390, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1358/6570843>.

Crowdy:2016:HBS

- [690] D. G. Crowdy, S. Tanveer, and T. Delillo. Hybrid basis scheme for computing electrostatic fields exterior to close-to-touching discs. *IMA Journal of Numerical Analysis*, 36(2):743–769, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/743>.

Csomos:2023:EES

- [691] Petra Csomós, Bálint Farkas, and Balázs Kovács. Error estimates for a splitting integrator for abstract semi-linear boundary coupled systems. *IMA Journal of Numerical Analysis*, 43(6):3628–3655, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3628/6989835>.

Csomos:2023:SOM

- [692] Petra Csomós and Dávid Kunszenti-Kovács. A second-order Magnus-type integrator for evolution equations with delay. *IMA Journal of Numerical Analysis*, 43(5):2965–2997, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2965/6760978>.

Cubillos:1987:EPF

- [693] Pedro O. Cubillos. Eigenvalue problems for Fredholm integral operators. *IMA Journal of Numerical Analysis*, 7(2):191–204, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cui:2014:AHM

- [694] Jintao Cui and Wujun Zhang. An analysis of HDG methods for the Helmholtz equation. *IMA Journal of Numerical Analysis*, 34(1):279–295, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/279.full.pdf+html>.

Cullinan:1990:DSU

- [695] M. P. Cullinan. Data smoothing using nonnegative divided differences and l_2 approximation. *IMA Journal of Numerical Analysis*, 10(4):583–608, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Cuminato:1992:UCC

- [696] J. A. Cuminato. Uniform convergence of a collocation method for the numerical solution of Cauchy-type sin-

gular integral equations: a generalization. *IMA Journal of Numerical Analysis*, 12(1):31–45, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Curtis:1981:PST

- [697] A. R. Curtis. On a property of some test equations for finite difference or finite element methods. *IMA Journal of Numerical Analysis*, 1(3):369–375, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Curtis:1983:JMP

- [698] A. R. Curtis. Jacobian matrix properties and their impact on choice of software for stiff ODE systems. *IMA Journal of Numerical Analysis*, 3(4):397–415, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Curtis:1986:ACA

- [699] A. R. Curtis. Analysis of covariance after nonlinear least-squares fitting. *IMA Journal of Numerical Analysis*, 6(4):453–461, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Curtis:2016:HNC

- [700] Frank E. Curtis and Wei Guo. Handling nonpositive curvature in a limited memory steepest descent method. *IMA Journal of Numerical Analysis*, 36(2):717–742, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/717>.

Curtis:2018:LCL

- [701] Frank E. Curtis and Wei Guo. R -linear convergence of limited memory steepest descent. *IMA Journal of Numerical Analysis*, 38(2):720–742, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/720/3749201>.

Curtis:2008:FPF

- [702] Frank E. Curtis and Jorge Nocedal. Flexible penalty functions for nonlinear constrained optimization. *IMA Journal of Numerical Analysis*, 28(4):749–769, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/749>.

Curtis:2019:IRN

- [703] Frank E. Curtis, Daniel P. Robinson, and Mohammadreza Samadi. An inexact regularized Newton framework with a worst-case iteration complexity of $\mathcal{O}(\varepsilon^{-3/2})$ for nonconvex optimization. *IMA Journal of Numerical Analysis*, 39(3):1296–1327, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1296/4992683>.

Curtis:2020:SCV

- [704] Frank E. Curtis, Daniel P. Robinson, and Baoyu Zhou. A self-correcting variable-metric algorithm framework for nonsmooth optimization. *IMA Journal of Numerical Analysis*, 40(2):1154–1187, April 2020. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1154/5369122>.

Custodio:2008:USG

- [705] A. L. Custódio, J. E. Dennis, Jr., and L. N. Vicente. Using simplex gradients of nonsmooth functions in direct search methods. *IMA Journal of Numerical Analysis*, 28(4):770–784, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/770>.

Cuyt:1988:EBC

- [706] Annie Cuyt and Brigitte Verdonk. Evaluation of branched continued fractions using block-tridiagonal linear systems. *IMA Journal of Numerical Analysis*, 8(2):209–217, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Czepiel:2015:NSV

- [707] Jerzy Czepiel and Piotr Kalita. Numerical solution of a variational-hemivariational inequality modelling simplified adhesion of an elastic body. *IMA Journal of Numerical Analysis*, 35(1):372–393, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/372>.

Czuprynski:2019:NAE

- [708] Kenneth Czuprynski, Joseph Eichholz, and Weimin Han. Numerical analysis of the energy-dependent radiative transfer equation. *IMA*

Journal of Numerical Analysis, 39 (3):1529–1562, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1529/5003205>.

Da:2002:UBT

- [709] Xu Da. Uniform l behaviour for time discretization of a Volterra equation with completely monotonic kernel: I. stability. *IMA Journal of Numerical Analysis*, 22(1):133–151, January 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220133.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220133.pdf.

daVeiga:2011:UAH

- [710] Beirão da Veiga, Jérôme Droniou, and Gianmarco Manzini. A unified approach for handling convection terms in finite volumes and mimetic discretization methods for elliptic problems. *IMA Journal of Numerical Analysis*, 31(4):1357–1401, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1357.full.pdf+html>.

daVeiga:2023:ISP

- [711] L. Beirão da Veiga and L. Mascotto. Interpolation and stability properties of low-order face and edge virtual element spaces. *IMA Journal of Numerical Analysis*, 43(2):828–851, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL

<http://academic.oup.com/imajna/article/43/2/828/6553575>.

daVeiga:2024:EPR

- [712] Lourenço Beirão da Veiga, Franco Dassi, and Giuseppe Vacca. Erratum to ‘Pressure robust SUPG-stabilized finite elements for the unsteady Navier–Stokes equation’. *IMA Journal of Numerical Analysis*, 44(6):3815–3819, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3815/7692196>. See [272].

daVeiga:2014:VEM

- [713] Lourenço Beirão da Veiga and Gianmarco Manzini. A virtual element method with arbitrary regularity. *IMA Journal of Numerical Analysis*, 34(2):759–781, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/759.full.pdf+html>.

Dahlke:2022:WBA

- [714] S. Dahlke and T. M. Surowiec. Wavelet-based approximations of pointwise bound constraints in Lebesgue and Sobolev spaces. *IMA Journal of Numerical Analysis*, 42(1):417–439, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/417/5916501>.

Dahlke:2021:AQD

- [715] Stephan Dahlke, Ulrich Friedrich, Philipp Keding, Alexander Sieber, and

Thorsten Raasch. Adaptive quarkonial domain decomposition methods for elliptic partial differential equations. *IMA Journal of Numerical Analysis*, 41(4):2608–2638, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2608/5891830>.

Dahlke:2007:AFM

- [716] Stephan Dahlke, Thorsten Raasch, Manuel Werner, Massimo Fornasier, and Rob Stevenson. Adaptive frame methods for elliptic operator equations: the steepest descent approach. *IMA Journal of Numerical Analysis*, 27(4):717–740, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/717>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/717>.

Dahmardah:1983:FSS

- [717] H. O. Dahmardah and D. F. Mayers. A Fourier-series solution of the Crank-Gupta equation. *IMA Journal of Numerical Analysis*, 3(1):81–85, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dai:2015:CQO

- [718] Xiaoying Dai, Lianhua He, and Aihui Zhou. Convergence and quasi-optimal complexity of adaptive finite element computations for multiple eigenvalues. *IMA Journal of Numerical Analysis*, 35(4):1934–1977, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1934>.

Dai:1996:CPF

- [719] Y. H. Dai and Y. Yuan. Convergence properties of the Fletcher-Reeves method. *IMA Journal of Numerical Analysis*, 16(2):155–164, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160155.sgm.abs.html.

Dai:2006:CBB

- [720] Yu-Hong Dai, William W. Hager, Klaus Schittkowski, and Hongchao Zhang. The cyclic Barzilai-Borwein method for unconstrained optimization. *IMA Journal of Numerical Analysis*, 26(3):604–627, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/604>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/604>.

Dai:2002:RLC

- [721] Yu-Hong Dai and Li-Zhi Liao. R-linear convergence of the Barzilai and Borwein gradient method. *IMA Journal of Numerical Analysis*, 22(1):1–10, January 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220001.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220001.pdf.

Dai:2003:AMG

- [722] Yu-Hong Dai and Ya-Xiang Yuan. Alternate minimization gradient method. *IMA Journal of Numerical Analysis*, 23(3):377–393, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/drg007.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg007.pdf.

Dallmann:2016:LPS

- [723] Helene Dallmann, Daniel Arndt, and Gert Lube. Local projection stabilization for the Oseen problem. *IMA Journal of Numerical Analysis*, 36(2):796–823, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/796>.

Dardalhon:2013:APM

- [724] F. Dardalhon, J.-C. Latché, and S. Minjeaud. Analysis of a projection method for low-order nonconforming finite elements. *IMA Journal of Numerical Analysis*, 33(1):295–317, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/295.full.pdf+html>.

Das:1989:PEE

- [725] P. C. Das and A. K. Pani. A priori error estimates in H^1 and H^2 norms for Galerkin approximations to a single-phase nonlinear Stefan problem in one space dimension. *IMA Journal of Numerical Analysis*, 9(2):213–229, 1989.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dassi:2024:MVE

- [726] Franco Dassi, Alessio Fumagalli, Ilario Mazzieri, and Giuseppe Vacca. Mixed virtual element approximation of linear acoustic wave equation. *IMA Journal of Numerical Analysis*, 44(5):2864–2891, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2864/7310895>.

Dauner:1989:ATA

- [727] Herbert Dauner and Christian H. Reinsch. An analysis of two algorithms for shape-preserving cubic spline interpolation. *IMA Journal of Numerical Analysis*, 9(3):299–314, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Daus:2021:CFV

- [728] Esther S. Daus, Ansgar Jüngel, and Antoine Zurek. Convergence of a finite-volume scheme for a degenerate-singular cross-diffusion system for biofilms. *IMA Journal of Numerical Analysis*, 41(2):935–973, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/935/5877757>.

Davies:2004:SP

- [729] E. B. Davies and M. Plum. Spectral pollution. *IMA Journal of Numerical Analysis*, 24(3):417–438, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/drg007.sgm.abs.html.

oup.co.uk/imanum/hdb/Volume_24/Issue_03/240417.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240417.pdf.

Davis:2020:NLP

- [730] Damek Davis, Dmitriy Drusvyatskiy, and Courtney Paquette. The non-smooth landscape of phase retrieval. *IMA Journal of Numerical Analysis*, 40(4):2652–2695, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2652/5684995>.

Davydov:2019:OSS

- [731] Oleg Davydov and Robert Schaback. Optimal stencils in Sobolev spaces. *IMA Journal of Numerical Analysis*, 39(1):398–422, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/398/4781306>.

Davydov:2008:ISD

- [732] Oleg Davydov and Larry L. Schumaker. Interpolation and scattered data fitting on manifolds using projected Powell–Sabin splines. *IMA Journal of Numerical Analysis*, 28(4):785–805, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/785>.

Dawson:1982:FAR

- [733] Jeremy E. Dawson. A formula approximating the root of a function. *IMA Journal of Numerical Analysis*, 2(3):371–375, July 1982. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dax:1986:EAS

- [734] Achiya Dax. An efficient algorithm for solving the rectilinear multifacility location problem. *IMA Journal of Numerical Analysis*, 6(3):343–355, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dax:1989:MSL

- [735] Achiya Dax. The minimax solution of linear equations subject to linear constraints. *IMA Journal of Numerical Analysis*, 9(1):95–109, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

DeAsmundis:2013:SPS

- [736] Roberta De Asmundis, Daniela di Serafino, Filippo Riccio, and Gerardo Toraldo. On spectral properties of steepest descent methods. *IMA Journal of Numerical Analysis*, 33(4):1416–1435, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1416.full.pdf+html>.

DeBonis:2009:NMS

- [737] M. C. De Bonis and G. Mastroianni. Nyström method for systems of integral equations on the real semiaxis. *IMA Journal of Numerical Analysis*, 29(3):632–650, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/632>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/632>.

deDios:2023:PEP

- [738] Blanca Ayuso de Dios, Thirupathi Gudi, and Kamana Porwal. Pointwise *a posteriori* error analysis of a discontinuous Galerkin method for the elliptic obstacle problem. *IMA Journal of Numerical Analysis*, 43(4):2377–2412, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2377/6712215>.

deDios:2017:ASP

- [739] Blanca Ayuso de Dios, Ralf Hiptmair, and Cecilia Pagliantini. Auxiliary space preconditioners for SIP-DG discretizations of $H(\text{curl})$ -elliptic problems with discontinuous coefficients. *IMA Journal of Numerical Analysis*, 37(2):646–686, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/646/2669962/Auxiliary-space-preconditioners-for-SIP-DG>.

deFrutos:2019:EAN

- [740] Javier de Frutos, Bosco García-Archilla, Volker John, and Julia Novo. Error analysis of non inf-sup stable discretizations of the time-dependent Navier–Stokes equations with local projection stabilization. *IMA Journal of Numerical Analysis*, 39(4):1747–1786, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1747/5055331>.

DeFrutos:2010:AAT

- [741] Javier De Frutos, Bosco García-Archilla, and Julia Novo. Accurate approximations to time-dependent nonlinear convection–diffusion problems. *IMA Journal of Numerical Analysis*, 30(4):1137–1158, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1137.full.pdf+html>.

deFrutos:2011:NCD

- [742] Javier de Frutos, Bosco García-Archilla, and Julia Novo. Nonlinear convection-diffusion problems: fully discrete approximations and a posteriori error estimates. *IMA Journal of Numerical Analysis*, 31(4):1402–1430, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1402.full.pdf+html>.

Ysern:2015:OES

- [743] Bernardo de la Calle Ysern. Optimal extension of the Szegő quadrature. *IMA Journal of Numerical Analysis*, 35(2):722–748, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/722>.

DeLeo:2016:HOT

- [744] Mariano De Leo, Diego Rial, and Constanza Sánchez de la Vega. High-order time-splitting methods for irreversible equations. *IMA Journal of Numerical Analysis*, 36(4):1842–1866,

October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1842>.

deNiet:2009:NSF

- [745] Arie C. de Niet and Fred W. Wubs. Numerically stable LDL^T -factorization of \mathcal{F} -type saddle point matrices. *IMA Journal of Numerical Analysis*, 29(1):208–234, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

dePillis:1981:IMP

- [746] J. de Pillis and M. Neumann. Iterative methods with k -part splittings. *IMA Journal of Numerical Analysis*, 1(1):65–79, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ryck:2024:EEP

- [747] Tim De Ryck, Ameya D. Jagtap, and Siddhartha Mishra. Error estimates for physics-informed neural networks approximating the Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 44(1):83–119, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/83/6989836>.

deTeran:2016:BSP

- [748] Fernando de Terán, Froilán M. Dopico, and Javier Pérez. Backward stability of polynomial root-finding using Fiedler companion matrices. *IMA Journal of Numerical Analysis*, 36(1):133–173, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/36/1/133>.

Deckelnick:2010:NBF

- [749] Klaus Deckelnick, Gerhard Dziuk, Charles M. Elliott, and Claus-Justus Heine. An h -narrow band finite-element method for elliptic equations on implicit surfaces. *IMA Journal of Numerical Analysis*, 30(2):351–376, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/351>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/351>.

Deckelnick:1998:FEE

- [750] Klaus Deckelnick and Charles M. Elliott. Finite element error bounds for a curve shrinking with prescribed normal contact to a fixed boundary. *IMA Journal of Numerical Analysis*, 18(4):635–654, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180635.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180635.pdf.

Deckelnick:2025:DAC

- [751] Klaus Deckelnick and Robert Nürnberg. Discrete anisotropic curve shortening flow in higher codimension. *IMA Journal of Numerical Analysis*, 45(1):36–67, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/36/7678822>.

Deckelnick:2000:CDF

- [752] Klaus Deckelnick and Kunibert G. Siebert. $W^{1,\infty}$ -convergence of the discrete free boundary for obstacle problems. *IMA Journal of Numerical Analysis*, 20(3):481–498, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200481.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200481.pdf.

Deckers:2015:CDT

- [753] Karl Deckers. Christoffel–Darboux-type formulae for orthonormal rational functions with arbitrary complex poles. *IMA Journal of Numerical Analysis*, 35(4):1842–1863, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1842>.

Deckers:2009:RAO

- [754] Karl Deckers and Adhemar Bultheel. Recurrence and asymptotics for orthonormal rational functions on an interval. *IMA Journal of Numerical Analysis*, 29(1):1–23, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Deconinck:2022:NUT

- [755] Bernard Deconinck, Thomas Trogon, and Xin Yang. The numerical unified transform method for initial-boundary value problems on the half-line. *IMA Journal of Numerical Analysis*, 42(2):1400–1433, April 2022. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1400/6157012>.

Dedieu:2013:ASS

- [756] Jean-Pierre Dedieu, Gregorio Malajovich, and Michael Shub. Adaptive step-size selection for homotopy methods to solve polynomial equations. *IMA Journal of Numerical Analysis*, 33(1):1–29, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/1.full.pdf+html>.

Dedieu:2003:NMR

- [757] Jean-Pierre Dedieu, Pierre Priouret, and Gregorio Malajovich. Newton’s method on Riemannian manifolds: covariant alpha theory. *IMA Journal of Numerical Analysis*, 23(3):395–419, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/drg003.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg003.pdf.

Dedner:2022:RNV

- [758] Andreas Dedner and Alice Hodson. Robust nonconforming virtual element methods for general fourth-order problems with varying coefficients. *IMA Journal of Numerical Analysis*, 42(2):1364–1399, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1364/6174313>.

Dehghan:2024:FMV

- [759] Mehdi Dehghan and Zeinab Gharibi. A fully mixed virtual element method for Darcy–Forchheimer miscible displacement of incompressible fluids appearing in porous media. *IMA Journal of Numerical Analysis*, 44(2):797–835, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/797/7165318>.

Deif:1990:RPP

- [760] A. S. Deif. Realistic a priori and a posteriori error bounds for computed eigenvalues. *IMA Journal of Numerical Analysis*, 10(3):323–329, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

DelBuono:2002:MMA

- [761] Nicoletta Del Buono and Adrian T. Hill. On a multistep method approximating a linear sectorial evolution equation. *IMA Journal of Numerical Analysis*, 22(3):481–499, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220481.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220481.pdf.

DelPezzo:2015:OCF

- [762] Leandro M. Del Pezzo and Sandra Martínez. Order of convergence of the finite element method for the $p(x)$ -Laplacian. *IMA Journal of Numerical Analysis*, 35(4):1864–1887, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1864>.

Delbourgo:1994:AEH

- [763] D. Delbourgo and D. Elliott. On the approximate evaluation of Hadamard finite-part integrals. *IMA Journal of Numerical Analysis*, 14(4):485–500, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Delbourgo:1989:SPI

- [764] R. Delbourgo. Shape preserving interpolation to convex data by rational functions with quadratic numerator and linear denominator. *IMA Journal of Numerical Analysis*, 9(1):123–136, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Delbourgo:1983:RQS

- [765] R. Delbourgo and J. A. Gregory. C^2 rational quadratic spline interpolation to monotonic data. *IMA Journal of Numerical Analysis*, 3(2):141–152, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Delbourgo:1985:DDP

- [766] R. Delbourgo and J. A. Gregory. The determination of derivative parameters for a monotonic rational quadratic interpolant. *IMA Journal of Numerical Analysis*, 5(4):397–406, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

DellAccio:2016:AOT

- [767] Francesco Dell’Accio, Filomena Di Tommaso, and Kai Hormann. On the approximation order of triangular Shepard interpolation. *IMA Jour-*

nal of Numerical Analysis, 36(1):359–379, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/359>.

Dellnitz:1992:CBP

- [768] Michael Dellnitz. Computational bifurcation of periodic solutions in systems with symmetry. *IMA Journal of Numerical Analysis*, 12(3):429–455, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

Dellnitz:2002:FZM

- [769] Michael Dellnitz, Oliver Schütze, and Stefan Sertl. Finding zeros by multilevel subdivision techniques. *IMA Journal of Numerical Analysis*, 22(2):167–185, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220167.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220167.pdf.

Demetriou:1991:LSS

- [770] I. C. Demetriou and M. J. D. Powell. Least squares smoothing of univariate data to achieve piecewise monotonicity. *IMA Journal of Numerical Analysis*, 11(3):411–432, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Demetriou:1991:MSS

- [771] I. C. Demetriou and M. J. D. Powell. The minimum sum of squares change

to univariate data that gives convexity. *IMA Journal of Numerical Analysis*, 11(3):433–448, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Demlow:2023:MNE

- [772] Alan Demlow, Sebastian Franz, and Natalia Kopteva. Maximum norm *a posteriori* error estimates for convection-diffusion problems. *IMA Journal of Numerical Analysis*, 43(5):2562–2584, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2562/7046306>.

Deng:2023:MIA

- [773] Kangkang Deng and Zheng Peng. A manifold inexact augmented Lagrangian method for nonsmooth optimization on Riemannian submanifolds in Euclidean space. *IMA Journal of Numerical Analysis*, 43(3):1653–1684, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1653/6590238>.

Derevianko:2023:EEE

- [774] Nadiia Derevianko, Gerlind Plonka, and Markus Petz. From ESPRIT to ESPIRA: estimation of signal parameters by iterative rational approximation. *IMA Journal of Numerical Analysis*, 43(2):789–827, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/789/6525860>.

Descombes:2013:LTS

- [775] Stéphane Descombes and Mechthild Thalhammer. The Lie–Trotter splitting for nonlinear evolutionary problems with critical parameters: a compact local error representation and application to nonlinear Schrödinger equations in the semiclassical regime. *IMA Journal of Numerical Analysis*, 33(2):722–745, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/722.full.pdf+html>.

Deugoue:2021:FDf

- [776] G. Deugoué, B. Jidjou Moghomye, and T. Tachim Medjo. Fully discrete finite element approximation of the stochastic Cahn–Hilliard–Navier–Stokes system. *IMA Journal of Numerical Analysis*, 41(4):3046–3112, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/3046/5916888>.

Devaud:2020:PGS

- [777] Denis Devaud. Petrov–Galerkin space-time hp -approximation of parabolic equations in $H^{1/2}$. *IMA Journal of Numerical Analysis*, 40(4):2717–2745, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2717/5588352>.

dHalluin:2005:RNM

- [778] Y. d’Halluin, P. A. Forsyth, and K. R. Vetzal. Robust numerical methods for contingent claims under jump diffusion

processes. *IMA Journal of Numerical Analysis*, 25(1):87–112, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/87>; <http://imanum.oupjournals.org/cgi/reprint/25/1/87>.

Dharmaraja:2010:OST

- [779] Sohan Dharmaraja, Yinghui Wang, and Gilbert Strang. Optimal stability for trapezoidal–backward difference split-steps. *IMA Journal of Numerical Analysis*, 30(1):141–148, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/141>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/141>.

DiFratta:2020:LSO

- [780] Giovanni Di Fratta, Carl-Martin Pfeiler, Dirk Praetorius, Michele Ruggeri, and Bernhard Stiftner. Linear second-order IMEX-type integrator for the (eddy current) Landau–Lifshitz–Gilbert equation. *IMA Journal of Numerical Analysis*, 40(4):2802–2838, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2802/5618688>.

DiPietro:2024:AOD

- [781] Daniele A. Di Pietro. An arbitrary-order discrete rot-rot complex on polygonal meshes with application to a quad-rot problem. *IMA Journal of Numerical Analysis*, 44(3):

1699–1730, May 2024. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1699/7249211>.

DiPietro:2017:AOM

- [782] Daniele A. Di Pietro and Alexandre Ern. Arbitrary-order mixed methods for heterogeneous anisotropic diffusion on general meshes. *IMA Journal of Numerical Analysis*, 37(1):40–63, January 1, 2017. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/40/2669935/Arbitrary-order-mixed-methods-for-heterogeneous>.

Dick:2007:RSA

- [783] Josef Dick, Gunther Leobacher, and Friedrich Pillichshammer. Randomized Smolyak algorithms based on digital sequences for multivariate integration. *IMA Journal of Numerical Analysis*, 27(4):655–674, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/655>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/655>.

Diegel:2016:SCS

- [784] Amanda E. Diegel, Cheng Wang, and Steven M. Wise. Stability and convergence of a second-order mixed finite element method for the Cahn–Hilliard equation. *IMA Journal of Numerical Analysis*, 36(4):1867–1897, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1867>.

Diening:2014:LDG

- [785] Lars Diening, Dietmar Kröner, Michael Ruzicka, and Ioannis Touloupoulos. A local discontinuous Galerkin approximation for systems with p -structure. *IMA Journal of Numerical Analysis*, 34(4):1447–1488, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1447>.

Diening:2021:UHN

- [786] Lars Diening, Toni Scharle, and Endre Süli. Uniform Hölder-norm bounds for finite element approximations of second-order elliptic equations. *IMA Journal of Numerical Analysis*, 41(3):1846–1898, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/1846/6271311>.

Dierckx:1981:ASF

- [787] P. Dierckx. An algorithm for surface-fitting with spline functions. *IMA Journal of Numerical Analysis*, 1(3):267–283, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dierckx:1992:ASF

- [788] P. Dierckx, S. Van Leemput, and T. Vermeire. Algorithms for surface fitting using Powell–Sabin splines. *IMA Journal of Numerical Analysis*, 12(2):271–299, 1992. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Diethelm:1997:GCQ

- [789] Kai Diethelm. Generalized compound quadrature formulae for finite-part integrals. *IMA Journal of Numerical Analysis*, 17(3):479–493, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170479.sgm.abs.html.

Ding:2024:RAS

- [790] Xiao-Li Ding and Dehua Wang. Regularity analysis for SEEs with multiplicative fBms and strong convergence for a fully discrete scheme. *IMA Journal of Numerical Analysis*, 44(3):1435–1463, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1435/7111991>.

Diogo:1991:HTC

- [791] Teresa Diogo, Sean McKee, and Tao Tang. A Hermite-type collocation method for the solution of an integral equation with a certain weakly singular kernel. *IMA Journal of Numerical Analysis*, 11(4):595–605, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dione:2020:OEE

- [792] Ibrahima Dione. Optimal error estimates of the unilateral contact problem in a curved and smooth boundary domain by the penalty method. *IMA Journal of Numerical Analysis*, 40(1):729–763, January 2020. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/729/5060523>.

Discacciati:2018:OSM

- [793] Marco Discacciati and Luca Gerardo-Giorda. Optimized Schwarz methods for the Stokes–Darcy coupling. *IMA Journal of Numerical Analysis*, 38(4):1959–1983, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1959/4124872>.

Discacciati:2024:OSM

- [794] Marco Discacciati and Tommaso Vanzan. Optimized Schwarz methods for the time-dependent Stokes–Darcy coupling. *IMA Journal of Numerical Analysis*, 44(4):2251–2276, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2251/7237438>.

Ditzian:1988:MSD

- [795] Z. Ditzian. The modulus of smoothness and discrete data in a square domain. *IMA Journal of Numerical Analysis*, 8(3):311–319, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dixon:1984:RII

- [796] Jennifer Dixon and Sean McKee. Repeated integral inequalities. *IMA Journal of Numerical Analysis*, 4(1):99–107, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dixon:1985:UAC

- [797] Jennifer Dixon and Sean McKee. A unified approach to convergence analysis of discretization methods for Volterra-type equations. *IMA Journal of Numerical Analysis*, 5(1):41–57, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dobson:2014:TNP

- [798] Matthew Dobson. There is no pointwise consistent quasicontinuum energy. *IMA Journal of Numerical Analysis*, 34(4):1541–1553, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1541>.

Dobson:2013:SSH

- [799] Matthew Dobson, Claude Le Bris, and Frédéric Legoll. Symplectic schemes for highly oscillatory Hamiltonian systems: the homogenization approach beyond the constant frequency case. *IMA Journal of Numerical Analysis*, 33(1):30–56, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/30.full.pdf+html>.

Doding:2024:UBE

- [800] Christian Doding and Patrick Henning. Uniform L^∞ -bounds for energy-conserving higher-order time integrators for the Gross–Pitaevskii equation with rotation. *IMA Journal of Numerical Analysis*, 44(5):2892–2935, September 2024. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2892/7333568>.

Dohler:1991:SGR

- [801] R. Döhler. Squared Givens rotation. *IMA Journal of Numerical Analysis*, 11(1):1–5, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dolejsi:2008:OEE

- [802] Vít Dolejší, Miloslav Feistauer, Václav Kucera, and Veronika Sobotíková. An optimal $L(L^2)$ -error estimate for the discontinuous Galerkin approximation of a nonlinear non-stationary convection–diffusion problem. *IMA Journal of Numerical Analysis*, 28(3):496–521, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/496>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/496>.

Dolgov:2021:GPE

- [803] Sergey Dolgov and Tomáš Vejchodský. Guaranteed a posteriori error bounds for low-rank tensor approximate solutions. *IMA Journal of Numerical Analysis*, 41(2):1240–1266, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1240/5854460>.

Dominguez:2011:SEE

- [804] V. Domínguez, I. G. Graham, and V. P. Smyshlyaev. Stability and error estimates for Filon–Clenshaw–Curtis rules for highly oscillatory in-

tegrals. *IMA Journal of Numerical Analysis*, 31(4):1253–1280, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1253.full.pdf+html>.

Dond:2017:CAL

- [805] Asha K. Dond, Neela Nataraj, and Amiya Kumar Pani. Convergence of an adaptive lowest-order Raviart–Thomas element method for general second-order linear elliptic problems. *IMA Journal of Numerical Analysis*, 37(2):832–860, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/832/2669977/Convergence-of-an-adaptive-lowest-order-Raviart>.

Dong:2017:UHD

- [806] Haixia Dong, Bo Wang, Ziqing Xie, and Li-Lian Wang. An unfitted hybridizable discontinuous Galerkin method for the Poisson interface problem and its error analysis. *IMA Journal of Numerical Analysis*, 37(1):444–476, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/444/2884283/An-unfitted-hybridizable-discontinuous-Galerkin>.

Dong:2025:OCA

- [807] Xiaojing Dong, Huayi Huang, Yunqing Huang, Xiaojuan Shen, and Qili Tang. Optimal convergence analysis of two RPC-SAV schemes for the unsteady incompressible magnetohydrodynamics equations. *IMA Journal of Numerical*

Analysis, 45(2):799–842, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/799/7670603>.

Dong:2024:HHO

- [808] Zhaonan Dong and Alexandre Ern. C^0 -hybrid high-order methods for bi-harmonic problems. *IMA Journal of Numerical Analysis*, 44(1):24–57, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/24/7059041>.

Donnelly:1989:SBC

- [809] J. D. P. Donnelly. Stable boundary conditions for some hyperbolic difference schemes. *IMA Journal of Numerical Analysis*, 9(4):487–505, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dopico:2012:ASS

- [810] Froilán M. Dopico and Juan M. Molera. Accurate solution of structured linear systems via rank-revealing decompositions. *IMA Journal of Numerical Analysis*, 32(3):1096–1116, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1096.full.pdf+html>.

Dorich:2024:MNE

- [811] Benjamin Dörich, Jan Leibold, and Bernhard Maier. Maximum norm error bounds for the full discretization of nonautonomous wave equations. *IMA Journal of Numerical Analysis*,

44(4):2480–2512, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2480/7260054>.

Dormand:1984:GEE

- [812] J. R. Dormand, R. R. Duckers, and P. J. Prince. Global error estimation with Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 4(2):169–184, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dormand:1987:FRK

- [813] J. R. Dormand, M. E. A. El-Mikkawy, and P. J. Prince. Families of Runge–Kutta–Nyström formulae. *IMA Journal of Numerical Analysis*, 7(2):235–250, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dormand:1987:HOE

- [814] J. R. Dormand, M. E. A. El-Mikkawy, and P. J. Prince. High-order embedded Runge–Kutta–Nyström formulae. *IMA Journal of Numerical Analysis*, 7(4):423–430, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See corrigendum [815].

Dormand:1991:CHO

- [815] J. R. Dormand, M. E. A. El-Mikkawy, and P. J. Prince. Corrigendum: “High-order embedded Runge–Kutta–Nyström formulae” [IMA J. Numer. Anal. **7** (1987), no. 4, 423–430; MR 90d:65136]. *IMA Journal of Numerical Analysis*, 11(2):297, 1991. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See [814].

Dormand:1985:GEE

- [816] J. R. Dormand and P. J. Prince. Global error estimation with Runge–Kutta methods. II. *IMA Journal of Numerical Analysis*, 5(4):481–497, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

dosReis:2022:SMV

- [817] Gonçalo dos Reis, Stefan Engelhardt, and Greig Smith. Simulation of McKean–Vlasov SDEs with super-linear growth. *IMA Journal of Numerical Analysis*, 42(1):874–922, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/874/6121618>.

Doss:2005:QMU

- [818] L. Jones Doss and Amiya K. Pani. A qualocation method for a unidimensional single phase semilinear Stefan problem. *IMA Journal of Numerical Analysis*, 25(1):139–159, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/139>; <http://imanum.oupjournals.org/cgi/reprint/25/1/139>.

Doucette:1994:NMN

- [819] Robert L. Doucette. A Nyström method for the numerical solution of Laplace’s equation with non-linear boundary conditions on a polygon. *IMA Journal of Numerical Analysis*, 14(4):501–522, 1994. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dougalis:2022:HOF

- [820] Vassilios A. Dougalis and Ángel Durán. A high-order fully discrete scheme for the Korteweg–de Vries equation with a time-stepping procedure of Runge–Kutta-composition type. *IMA Journal of Numerical Analysis*, 42(4):3022–3057, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3022/6350135>.

Driscoll:2016:RSC

- [821] Tobin A. Driscoll and Nicholas Hale. Rectangular spectral collocation. *IMA Journal of Numerical Analysis*, 36(1):108–132, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/108>.

Drmac:1999:PCS

- [822] Zlatko Drmač. A posteriori computation of the singular vectors in a preconditioned Jacobi SVD algorithm. *IMA Journal of Numerical Analysis*, 19(2):191–213, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190191.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190191.pdf.

Droniou:2003:CFV

- [823] J. Droniou, R. Eymard, D. Hilhorst, and X. D. Zhou. Convergence of a finite-volume mixed

finite-element method for an elliptic-hyperbolic system. *IMA Journal of Numerical Analysis*, 23(3):507–538, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/230507.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/230507.pdf.

Droniou:2016:GSS

- [824] Jérôme Droniou, Robert Eymard, and Pierre Feron. Gradient schemes for Stokes problem. *IMA Journal of Numerical Analysis*, 36(4):1636–1669, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1636>.

Droniou:2022:DCA

- [825] Jérôme Droniou, Benjamin Goldys, and Kim-Ngan Le. Design and convergence analysis of numerical methods for stochastic evolution equations with Leray–Lions operator. *IMA Journal of Numerical Analysis*, 42(2):1143–1179, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1143/6156651>.

Droniou:2019:MFE

- [826] Jérôme Droniou, Muhammad Ilyas, Bishnu P. Lamichhane, and Glen E. Wheeler. A mixed finite element method for a sixth-order elliptic problem. *IMA Journal of Numerical Analysis*, 39(1):374–397, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL

<http://academic.oup.com/imajna/article/39/1/374/4695479>.

Droniou:2018:IEG

- [827] Jérôme Droniou and Neela Nataraj. Improved L^2 estimate for gradient schemes and super-convergence of the TPFA finite volume scheme. *IMA Journal of Numerical Analysis*, 38(3):1254–1293, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1254/3860930>.

Droniou:2022:CAN

- [828] Jérôme Droniou, Neela Nataraj, and Gopikrishnan C. Remesan. Convergence analysis of a numerical scheme for a tumour growth model. *IMA Journal of Numerical Analysis*, 42(2):1180–1230, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1180/6218076>.

Droniou:2024:HHO

- [829] Jérôme Droniou and Liam Yemm. A hybrid high-order scheme for the stationary, incompressible magnetohydrodynamics equations. *IMA Journal of Numerical Analysis*, 44(1):262–296, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/262/7073957>.

Du:2009:AMF

- [830] Qiang Du, Lili Ju, and Li Tian. Analysis of a mixed finite-volume discretization of fourth-order equations

on general surfaces. *IMA Journal of Numerical Analysis*, 29(2):376–403, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/376>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/376>.

Du:2019:ACD

- [831] Qiang Du, Yunzhe Tao, Xiaochuan Tian, and Jiang Yang. Asymptotically compatible discretization of multidimensional nonlocal diffusion models and approximation of nonlocal Green's functions. *IMA Journal of Numerical Analysis*, 39(2):607–625, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/607/4959864>.

DuCroz:1992:SMM

- [832] Jeremy J. Du Croz and Nicholas J. Higham. Stability of methods for matrix inversion. *IMA Journal of Numerical Analysis*, 12(1):1–19, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duan:2023:PPF

- [833] Beiping Duan. Padé-parametric FEM approximation for fractional powers of elliptic operators on manifolds. *IMA Journal of Numerical Analysis*, 43(5):2633–2664, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2633/6692453>.

Duan:2020:NAF

- [834] Beiping Duan, Raytcho D. Lazarov, and Joseph E. Pasciak. Numerical approximation of fractional powers of elliptic operators. *IMA Journal of Numerical Analysis*, 40(3):1746–1771, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1746/5375861>.

Duan:2022:ASS

- [835] Huoyuan Duan, Jiwei Cao, Ping Lin, and Roger C. E. Tan. Approximation of singular solutions and singular data for Maxwell’s equations by Lagrange elements. *IMA Journal of Numerical Analysis*, 42(1):771–816, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/771/6065018>.

Duan:2015:SSF

- [836] Huoyuan Duan, Roger C. E. Tan, Suh-Yuh Yang, and Cheng-Shu You. An SPD stabilized finite element method for the Stokes equations. *IMA Journal of Numerical Analysis*, 35(4):1812–1841, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1812>.

Dubeau:1985:PQS

- [837] François Dubeau and Jean Savoie. Periodic quartic splines with equispaced knots. *IMA Journal of Numerical Analysis*, 5(2):183–189, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duff:1983:ENW

- [838] I. S. Duff and J. K. Reid. Errata: “A note on the work involved in no-fill sparse matrix factorization”. *IMA Journal of Numerical Analysis*, 3(2):253, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duff:1993:ELF

- [839] I. S. Duff, G. A. Watson, et al. Editorial: Leslie Fox, 1918–1992. *IMA Journal of Numerical Analysis*, 13(1):i–ii, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duff:2005:CE

- [840] Iain Duff and Endre Süli. Change of Editorship. *IMA Journal of Numerical Analysis*, 25(1):i, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/reprint/25/1/i>.

Duff:1991:FSS

- [841] Iain S. Duff, N. I. M. Gould, J. K. Reid, J. A. Scott, and K. Turner. The factorization of sparse symmetric indefinite matrices. *IMA Journal of Numerical Analysis*, 11(2):181–204, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duff:1987:SSS

- [842] Iain S. Duff and Ulrich Nowak. On sparse solvers in a stiff integrator of extrapolation type. *IMA Journal of Numerical Analysis*, 7(4):391–405, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duff:1983:NWI

- [843] Iain S. Duff and J. K. Reid. A note on the work involved in no-fill sparse matrix factorization. *IMA Journal of Numerical Analysis*, 3(1):37–40, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duff:2019:SPS

- [844] Timothy Duff, Cvetelina Hill, Anders Jensen, Kisun Lee, Anton Leykin, and Jeff Sommars. Solving polynomial systems via homotopy continuation and monodromy. *IMA Journal of Numerical Analysis*, 39(3):1421–1446, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1421/4969753>.

Dujardin:2016:ABS

- [845] Guillaume Dujardin and Pauline Lafitte. Asymptotic behaviour of splitting schemes involving time-subcycling techniques. *IMA Journal of Numerical Analysis*, 36(4):1804–1841, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1804>.

Dumas:2011:CCW

- [846] W. M. Dumas and M. V. Tretyakov. Computing conditional Wiener integrals of functionals of a general form. *IMA Journal of Numerical Analysis*, 31(3):1217–1251, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1217.full.pdf+html>.

[oxfordjournals.org/content/31/3/1217.full.pdf+html](http://imajna.oxfordjournals.org/content/31/3/1217.full.pdf+html).

Duncan:1991:SES

- [847] D. B. Duncan. A simple and effective self-adaptive moving mesh for enthalpy formulations of phase change problems. *IMA Journal of Numerical Analysis*, 11(1):55–78, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duncan:2007:OGD

- [848] Dugald B. Duncan and Yiqi Qiu. Overlapping grids for the diffusion equation. *IMA Journal of Numerical Analysis*, 27(3):550–575, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/550>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/550>.

Dung:2024:ONI

- [849] Dinh Dũng and Van Kien Nguyen. Optimal numerical integration and approximation of functions on R^d equipped with Gaussian measure. *IMA Journal of Numerical Analysis*, 44(2):1242–1267, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/1242/7234329>.

Dunne:2009:FMN

- [850] R. K. Dunne, E. O’Riordan, and G. I. Shishkin. Fitted mesh numerical methods for singularly perturbed elliptic problems with mixed derivatives. *IMA Journal of Numerical Analysis*, 29(3):

712–730, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/712>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/712>.

Dunst:2015:CRT

- [851] Thomas Dunst. Convergence with rates for a time-discretization of the Stochastic Landau–Lifschitz–Gilbert equation. *IMA Journal of Numerical Analysis*, 35(2):615–651, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/615>.

Dunst:2015:OCE

- [852] Thomas Dunst, Markus Klein, Andreas Prohl, and Ailyn Schäfer. Optimal control in evolutionary micromagnetism. *IMA Journal of Numerical Analysis*, 35(3):1342–1380, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1342>.

Duran:2000:NIR

- [853] A. Durán and J. M. Sanz-Serna. The numerical integration of relative equilibrium solutions. The nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 20(2):235–261, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200235.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200235.pdf.

[//www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200235.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200235.pdf).

Duran:2012:SFE

- [854] R. G. Durán, A. L. Lombardi, and M. I. Prieto. Superconvergence for finite element approximation of a convection-diffusion equation using graded meshes. *IMA Journal of Numerical Analysis*, 32(2):511–533, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/511.full.pdf+html>.

Durand:2011:FDf

- [855] Stephane Durand and Marián Slodicka. Fully discrete finite element method for Maxwell’s equations with nonlinear conductivity. *IMA Journal of Numerical Analysis*, 31(4):1713–1733, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1713.full.pdf+html>.

Dussault:1998:APA

- [856] Jean-Pierre P. Dussault. Augmented penalty algorithms. *IMA Journal of Numerical Analysis*, 18(3):355–372, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180355.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180355.pdf.

Dusson:2021:PPP

- [857] Geneviève Dusson. Post-processing of the plane-wave approximation

of Schrödinger equations. Part II: Kohn–Sham models. *IMA Journal of Numerical Analysis*, 41(4):2456–2487, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2456/5906628>.

Dusson:2017:PAN

- [858] Geneviève Dusson and Yvon Maday. *A posteriori* analysis of a nonlinear Gross–Pitaevskii-type eigenvalue problem. *IMA Journal of Numerical Analysis*, 37(1):94–137, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/94/2669933/A-posteriori-analysis-of-a-nonlinear-Gross>.

Dyn:2025:ISV

- [859] Nira Dyn, David Levin, and Qusay Muzaffar. Interpolation of set-valued functions. *IMA Journal of Numerical Analysis*, 45(2):696–733, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/696/7698101>.

Dyn:1990:DDT

- [860] Nira Dyn, David Levin, and Samuel Rippa. Data dependent triangulations for piecewise linear interpolation. *IMA Journal of Numerical Analysis*, 10(1):137–154, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dziuk:2007:FEE

- [861] G. Dziuk and C. M. Elliott. Finite elements on evolving surfaces. *IMA Jour-*

nal of Numerical Analysis, 27(2):262–292, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/262>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/262>.

Dziuk:2012:RKT

- [862] G. Dziuk, Ch. Lubich, and D. Mansour. Runge–Kutta time discretization of parabolic differential equations on evolving surfaces. *IMA Journal of Numerical Analysis*, 32(2):394–416, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/394.full.pdf+html>.

Eastwood:1987:SBN

- [863] James W. Eastwood and Wayne Arter. Spurious behaviour of numerically computed fluid flow. *IMA Journal of Numerical Analysis*, 7(2):205–222, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ecevit:2019:GBH

- [864] Fatih Ecevit and Hasan Hüseyin Eruslu. A Galerkin BEM for high-frequency scattering problems based on frequency-dependent changes of variables. *IMA Journal of Numerical Analysis*, 39(2):893–923, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/893/4836927>.

Edelmann:2022:FEA

- [865] Dominik Edelmann. Finite element analysis for a diffusion equation on a

harmonically evolving domain. *IMA Journal of Numerical Analysis*, 42(2):1866–1901, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1866/6263486>.

Effland:2022:CCA

- [866] Alexander Effland, Behrend Heeren, Martin Rumpf, and Benedikt Wirth. Consistent curvature approximation on Riemannian shape spaces. *IMA Journal of Numerical Analysis*, 42(1):78–106, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/78/6055248>.

Egger:2023:APD

- [867] H. Egger, J. Giesselmann, T. Kunkel, and N. Philippi. An asymptotic-preserving discretization scheme for gas transport in pipe networks. *IMA Journal of Numerical Analysis*, 43(4):2137–2168, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2137/6671755>. See correction [868].

Egger:2025:CAP

- [868] H Egger, J Giesselmann, T Kunkel, and N Philippi. Correction to: An asymptotic-preserving discretization scheme for gas transport in pipe networks. *IMA Journal of Numerical Analysis*, 45(2):1267, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/>

[article/45/2/1267/7642325](http://academic.oup.com/imajna/article/45/2/1267/7642325). See [867].

Egger:2010:HMD

- [869] Herbert Egger and Joachim Schöberl. A hybrid mixed discontinuous Galerkin finite-element method for convection–diffusion problems. *IMA Journal of Numerical Analysis*, 30(4):1206–1234, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1206.full.pdf+html>.

Egger:2013:AHD

- [870] Herbert Egger and Christian Waluga. *hp* analysis of a hybrid DG method for Stokes flow. *IMA Journal of Numerical Analysis*, 33(2):687–721, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/687.full.pdf+html>.

Egloff:2015:RWR

- [871] A.-C. Egloff, A. Gloria, J.-C. Mourrat, and T. N. Nguyen. Random walk in random environment, corrector equation and homogenized coefficients: from theory to numerics, back and forth. *IMA Journal of Numerical Analysis*, 35(2):499–545, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/499>.

Eibner:2006:LEA

- [872] T. Eibner and J. M. Melen. A local error analysis of the boundary-

- concentrated hp-FEM. *IMA Journal of Numerical Analysis*, 26(4):752–778, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/752>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/752>.
- [873] M. Eigel, E. George, and M. Kirkilionis. A mesh-free partition of unity method for diffusion equations on complex domains. *IMA Journal of Numerical Analysis*, 30(3):629–653, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/629>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/629>.
- [874] Martin Eigel and Rüdiger Müller. A posteriori error control for stationary coupled bulk-surface equations. *IMA Journal of Numerical Analysis*, 38(1):271–298, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/271/3065607>.
- [875] Erik Eikeland, Leszek Marcinkowski, and Talal Rahman. An adaptively enriched coarse space for Schwarz preconditioners for P_1 discontinuous Galerkin multiscale finite element problems. *IMA Journal of Numerical Analysis*, 41(4):2873–2895, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2873/5901595>.
- [876] Monika Eisenmann and Eskil Hansen. A variational approach to the sum splitting scheme. *IMA Journal of Numerical Analysis*, 42(1):923–950, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/923/6104153>.
- [877] L. El Alaoui, A. Ern, and E. Burman. A priori and a posteriori analysis of non-conforming finite elements with face penalty for advection–diffusion equations. *IMA Journal of Numerical Analysis*, 27(1):151–171, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/151>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/151>.
- [878] M. A. El-Gebeily and I. T. Abu-Zaid. On a finite difference method for singular two-point boundary value problems. *IMA Journal of Numerical Analysis*, 18(2):179–190, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180179.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180179.pdf.

Eisenmann:2022:VAS

Eigel:2010:MFP

ElAlaoui:2007:PPA

Eigel:2018:PEC

Eikeland:2021:AEC

El-Gebeily:1998:FDM

ElTarazi:1985:EIM

- [879] M. N. El Tarazi. Erratum: “Iterative methods for systems of first-order differential equations” [IMA J. Numer. Anal. **5** (1985), no. 1, 29–39; MR 86d:65087]. *IMA Journal of Numerical Analysis*, 5(4):503, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See [880].

ElTarazi:1985:IMS

- [880] Mouhamed Nabih El Tarazi. Iterative methods for systems of first-order differential equations. *IMA Journal of Numerical Analysis*, 5(1):29–39, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See erratum [879].

ElTarazi:1986:MPA

- [881] Mouhamed Nabih El Tarazi. On a monotony-preserving accelerator process for the successive approximations method. *IMA Journal of Numerical Analysis*, 6(4):439–446, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Elboulqe:2025:ESF

- [882] Y. Elboulqe and M. El Maghri. An explicit spectral Fletcher–Reeves conjugate gradient method for bi-criteria optimization. *IMA Journal of Numerical Analysis*, 45(1):223–242, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/223/7643964>.

Ellacott:1981:CSA

- [883] S. W. Ellacott. On the convergence of some approximate methods of confor-

mal mappings. *IMA Journal of Numerical Analysis*, 1(2):185–192, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ellacott:1983:CFE

- [884] S. W. Ellacott and M. H. Gutknecht. The Carathéodory–Fejér extension of a finite geometric series. *IMA Journal of Numerical Analysis*, 3(2):221–227, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ellacott:1983:PCF

- [885] S. W. Ellacott and M. H. Gutknecht. The polynomial Carathéodory–Fejér approximation method for Jordan regions. *IMA Journal of Numerical Analysis*, 3(2):207–220, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Elliott:1985:COS

- [886] C. M. Elliott. On the convergence of a one-step method for the numerical solution of an ordinary differential inclusion. *IMA Journal of Numerical Analysis*, 5(1):3–21, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Elliott:1987:EAE

- [887] C. M. Elliott. Error analysis of the enthalpy method for the Stefan problem. *IMA Journal of Numerical Analysis*, 7(1):61–71, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Elliott:2005:FEA

- [888] C. M. Elliott, D. Kay, and V. Styles. Finite element analysis of a current density–electric field formula-

tion of Bean's model for superconductivity. *IMA Journal of Numerical Analysis*, 25(1):182–204, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/182>;

Elliott:2021:UTC

- [889] C. M. Elliott and T. Ranner. A unified theory for continuous-in-time evolving finite element space approximations to partial differential equations in evolving domains. *IMA Journal of Numerical Analysis*, 41(3):1696–1845, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/1696/6000805>.

Elliott:2009:NAT

- [890] C. M. Elliott and S. A. Smithe-man. Numerical analysis of the TV regularization and H_1 fidelity model for decomposing an image into cartoon plus texture. *IMA Journal of Numerical Analysis*, 29(3):651–689, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/651>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/651>.

Elliott:1981:FEA

- [891] Charles M. Elliott. On the finite element approximation of an elliptic variational inequality arising from an implicit time discretization of the Ste-

fan problem. *IMA Journal of Numerical Analysis*, 1(1):115–125, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Elliott:2017:ACS

- [892] Charles M. Elliott and Hans Fritz. On approximations of the curve shortening flow and of the mean curvature flow based on the DeTurck trick. *IMA Journal of Numerical Analysis*, 37(2):543–603, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/543/2669973>/On-approximations-of-the-curve-shortening-flow-and.

Elliott:1983:EEF

- [893] Charles M. Elliott and Vladimír Janovský. An error estimate for a finite-element approximation of an elliptic variational inequality formulation of a Hele–Shaw moving-boundary problem. *IMA Journal of Numerical Analysis*, 3(1):1–9, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Elliott:2007:FEA

- [894] Charles M. Elliott and Yohei Kashima. A finite-element analysis of critical-state models for type-II superconductivity in 3D. *IMA Journal of Numerical Analysis*, 27(2):293–331, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/293>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/293>.

Elliott:2013:FEA

- [895] Charles M. Elliott and Thomas Ranner. Finite element analysis for a coupled bulk-surface partial differential equation. *IMA Journal of Numerical Analysis*, 33(2):377–402, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/377.full.pdf+html>.

Elliott:2011:NCA

- [896] Charles M. Elliott, Björn Stinner, Vanessa Styles, and Richard Welford. Numerical computation of advection and diffusion on evolving diffuse interfaces. *IMA Journal of Numerical Analysis*, 31(3):786–812, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/786.full.pdf+html>.

Elliott:2001:NAM

- [897] Charles M. Elliott and Vanessa Styles. Numerical analysis of a mean field model of superconducting vortices. *IMA Journal of Numerical Analysis*, 21(1):1–51, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210001.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210001.pdf.

Elliott:1993:AAT

- [898] David Elliott. An asymptotic analysis of two algorithms for certain Hadamard finite-part integrals. *IMA Journal*

of Numerical Analysis, 13(3):445–462, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Elman:2007:SSS

- [899] Howard Elman and Darran Furnival. Solving the stochastic steady-state diffusion problem using multigrid. *IMA Journal of Numerical Analysis*, 27(4):675–688, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/675>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/675>.

Elman:2016:EIA

- [900] Howard C. Elman and Minghao W. Rostami. Efficient iterative algorithms for linear stability analysis of incompressible flows. *IMA Journal of Numerical Analysis*, 36(1):296–316, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/296>.

Elschner:1997:QMS

- [901] Johannes Elschner and Ivan G. Graham. Quadrature methods for Symm's integral equation on polygons. *IMA Journal of Numerical Analysis*, 17(4):643–664, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170643.sgm.abs.html.

Elster:1995:GAB

- [902] Clemens Elster and Arnold Neumaier. A grid algorithm for bound con-

strained optimization of noisy functions. *IMA Journal of Numerical Analysis*, 15(4):585–608, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Engel:2021:OFE

- [903] Sebastian Engel, Boris Vexler, and Philip Trautmann. Optimal finite element error estimates for an optimal control problem governed by the wave equation with controls of bounded variation. *IMA Journal of Numerical Analysis*, 41(4):2639–2667, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2639/5875786>.

Engelborghs:1999:DCP

- [904] K. Engelborghs, K. Lust, and D. Roose. Direct computation of period doubling bifurcation points of large-scale systems of ODEs using a Newton–Picard method. *IMA Journal of Numerical Analysis*, 19(4):525–547, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190525.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190525.pdf.

Erath:2019:AVC

- [905] Christoph Erath and Dirk Praetorius. Adaptive vertex-centered finite volume methods for general second-order linear elliptic partial differential equations. *IMA Journal of Numerical Analysis*, 39(2):983–1008, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/983/4913310>.

academic.oup.com/imajna/article/39/2/983/4913310.

Erb:2020:SIS

- [906] Wolfgang Erb. A spectral interpolation scheme on the unit sphere based on the nodes of spherical Lissajous curves. *IMA Journal of Numerical Analysis*, 40(2):1330–1355, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1330/5256535>.

Erdogan:2019:NCE

- [907] Utku Erdogan and Gabriel J. Lord. A new class of exponential integrators for SDEs with multiplicative noise. *IMA Journal of Numerical Analysis*, 39(2):820–846, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/820/4955792>.

Ern:2022:ELG

- [908] Alexandre Ern, Thirupathi Gudi, Iain Smears, and Martin Vohralík. Equivalence of local- and global-best approximations, a simple stable local commuting projector, and optimal hp approximation estimates in $H(\text{div})$. *IMA Journal of Numerical Analysis*, 42(2):1023–1049, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1023/6171135>.

Ern:2019:EFP

- [909] Alexandre Ern, Iain Smears, and Martin Vohralík. Equilibrated flux a posteriori error estimates in $L^2(H^1)$ -norms for high-order discretizations

of parabolic problems. *IMA Journal of Numerical Analysis*, 39(3): 1158–1179, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1158/5041990>.

Ern:2009:DGM

- [910] Alexandre Ern, Annette F. Stephansen, and Paolo Zunino. A discontinuous Galerkin method with weighted averages for advection–diffusion equations with locally small and anisotropic diffusivity. *IMA Journal of Numerical Analysis*, 29(2):235–256, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/235>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/235>.

Ern:2020:QOV

- [911] Alexandre Ern and Pietro Zanotti. A quasi-optimal variant of the hybrid high-order method for elliptic partial differential equations with H^{-1} loads. *IMA Journal of Numerical Analysis*, 40(4):2163–2188, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2163/5686326>.

Ernst:2025:CWB

- [912] Lewin Ernst and Karsten Urban. A certified wavelet-based physics-informed neural network for the solution of parameterized partial differential equations. *IMA Journal of Numerical Analysis*, 45(1):494–515, January 2025. CODEN IJNADH. ISSN 0272-4979

(print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/494/7664632>.

Ervedoza:2016:NME

- [913] Sylvain Ervedoza, Aurora Marica, and Enrique Zuazua. Numerical meshes ensuring uniform observability of one-dimensional waves: construction and analysis. *IMA Journal of Numerical Analysis*, 36(2):503–542, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/503>.

Ervin:2006:ABE

- [914] Vincent J. Ervin and Norbert Heuer. An adaptive boundary element method for the exterior Stokes problem in three dimensions. *IMA Journal of Numerical Analysis*, 26(2):297–325, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/297>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/297>.

Escande:2016:FCL

- [915] Adrien Escande. Fast closest logarithm algorithm in the special orthogonal group. *IMA Journal of Numerical Analysis*, 36(2):675–687, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/675>.

Escande:2022:FWD

- [916] Paul Escande and Pierre Weiss. Fast wavelet decomposition of linear operators through product-convolution expansions. *IMA Journal of Numerical Analysis*, 42(1):569–596, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/569/5924594>.

Esser:2015:ARF

- [917] Patrick Esser and Jörg Grande. An accurate and robust finite element level set redistancing method. *IMA Journal of Numerical Analysis*, 35(4):1913–1933, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1913>.

Evans:2020:HBS

- [918] John A. Evans, Michael A. Scott, Kendrick M. Shepherd, Derek C. Thomas, and Rafael Vázquez Hernández. Hierarchical B-spline complexes of discrete differential forms. *IMA Journal of Numerical Analysis*, 40(1):422–473, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/422/5228145>.

Eymard:1998:EEA

- [919] R. Eymard, T. Gallouët, M. Ghilani, and R. Herbin. Error estimates for the approximate solutions of a nonlinear hyperbolic equation given by finite volume schemes. *IMA Journal of Numerical Analysis*, 18(4):563–594, October 1998. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180563.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180563.pdf.

Eymard:2006:CCF

- [920] R. Eymard, T. Gallouët, and R. Herbin. A cell-centred finite-volume approximation for anisotropic diffusion operators on unstructured meshes in any space dimension. *IMA Journal of Numerical Analysis*, 26(2):326–353, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/326>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/326>.

Eymard:2010:DHA

- [921] R. Eymard, T. Gallouët, and R. Herbin. Discretization of heterogeneous and anisotropic diffusion problems on general nonconforming meshes. Sushi: a scheme using stabilization and hybrid interfaces. *IMA Journal of Numerical Analysis*, 30(4):1009–1043, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1009.full.pdf+html>.

Eymard:2013:GOE

- [922] R. Eymard, C. Guichard, and R. Masson. Grid orientation effect in coupled finite volume schemes. *IMA Journal of Numerical Analysis*, 33(2):582–608, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/33/2/582.full.pdf+html>.

Eymard:2011:SFV

- [923] Robert Eymard, Angela Handlovičová, and Karol Mikula. Study of a finite volume scheme for the regularized mean curvature flow level set equation. *IMA Journal of Numerical Analysis*, 31(3): 813–846, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/813.full.pdf+html>.

Ezquerro:2002:GDC

- [924] J. A. Ezquerro and M. A. Hernández. Generalized differentiability conditions for Newton’s method. *IMA Journal of Numerical Analysis*, 22(2): 187–205, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220187.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220187.pdf.

Ezquerro:1997:MCM

- [925] José A. Ezquerro. A modification of the Chebyshev method. *IMA Journal of Numerical Analysis*, 17(4):511–525, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170511.sgm.abs.html.

Fabiano:1995:FDA

- [926] Richard H. Fabiano, Roger Knobel, and Bruce D. Lowe. A finite-difference algorithm for an inverse

Sturm–Liouville problem. *IMA Journal of Numerical Analysis*, 15(1):75–88, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fadili:2023:LCN

- [927] Jalal Fadili, Nicolas Forcadel, Thi Tuyen Nguyen, and Rita Zantout. Limits and consistency of nonlocal and graph approximations to the eikonal equation. *IMA Journal of Numerical Analysis*, 43(6):3685–3728, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3685/7005681>.

Faermann:2000:LAS

- [928] Birgit Faermann. Localization of the Aronszajn–Slobodeckij norm and application to adaptive boundary elements methods. Part I. The two-dimensional case. *IMA Journal of Numerical Analysis*, 20(2):203–234, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200203.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200203.pdf.

Fairweather:1991:BMN

- [929] G. Fairweather and J. C. López Marcos. A box method for a nonlinear equation of population dynamics. *IMA Journal of Numerical Analysis*, 11(4):525–538, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fairweather:1983:AED

- [930] G. Fairweather and A. V. Saylor. On

the application of extrapolation, deferred correction and defect correction to discrete-time Galerkin methods for parabolic problems. *IMA Journal of Numerical Analysis*, 3(2):173–192, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Falletta:2018:BCF

- [931] S. Falletta. BEM coupling with the FEM fictitious domain approach for the solution of the exterior Poisson problem and of wave scattering by rotating rigid bodies. *IMA Journal of Numerical Analysis*, 38(2):779–809, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/779/3749199>.

Falletta:2014:STB

- [932] S. Falletta, G. Monegato, and L. Scuderi. A space-time BIE method for wave equation problems: the (two-dimensional) Neumann case. *IMA Journal of Numerical Analysis*, 34(1):390–434, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/390.full.pdf+html>.

Falletta:2012:STB

- [933] Silvia Falletta, Giovanni Monegato, and Letizia Scuderi. A space-time Bie method for nonhomogeneous exterior wave equation problems. The Dirichlet case. *IMA Journal of Numerical Analysis*, 32(1):202–226, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/32/1/202.full.pdf+html>.

Fang:2020:FEM

- [934] Changjie Fang, Kenneth Czuprynski, Weimin Han, Xiaoliang Cheng, and Xiaoxia Dai. Finite element method for a stationary Stokes hemivariational inequality with slip boundary condition. *IMA Journal of Numerical Analysis*, 40(4):2696–2716, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2696/5539755>.

Fang:2022:QRE

- [935] Youhan Fang, Yudong Cao, and Robert D. Skeel. Quasi-reliable estimates of effective sample size. *IMA Journal of Numerical Analysis*, 42(1):680–697, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/680/5923770>.

Faou:2009:GHW

- [936] Erwan Faou and Vasile Gradinaru. Gauss–Hermite wave packet dynamics: convergence of the spectral and pseudo-spectral approximation. *IMA Journal of Numerical Analysis*, 29(4):1023–1045, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/1023>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/1023>.

Faou:2018:CNG

- [937] Erwan Faou and Tiphaine Jézéquel. Convergence of a normalized gradient algorithm for computing ground states. *IMA Journal of Numerical Analysis*, 38(1):360–376, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/360/3078587>.

Faou:2015:AES

- [938] Erwan Faou, Alexander Ostermann, and Katharina Schratz. Analysis of exponential splitting methods for inhomogeneous parabolic equations. *IMA Journal of Numerical Analysis*, 35(1):161–178, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/161>.

Farago:2009:CDP

- [939] István Faragó and Róbert Horváth. Continuous and discrete parabolic operators and their qualitative properties. *IMA Journal of Numerical Analysis*, 29(3):606–631, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/606>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/606>.

Farago:2012:DMP

- [940] István Faragó, János Karátson, and Sergey Korotov. Discrete maximum principles for nonlinear parabolic PDE

systems. *IMA Journal of Numerical Analysis*, 32(4):1541–1573, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1541.full.pdf+html>.

Farhloul:2001:RMF

- [941] M. Farhloul, S. Nicaise, and L. Paquet. A refined mixed finite element method for the Boussinesq equations in polygonal domains. *IMA Journal of Numerical Analysis*, 21(2):525–551, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210525.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210525.pdf.

Farhloul:1998:MFE

- [942] Mohamed Farhloul. A mixed finite element method for a nonlinear Dirichlet problem. *IMA Journal of Numerical Analysis*, 18(1):121–132, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180121.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180121.pdf.

Farhloul:2008:RMF

- [943] Mohamed Farhloul, Serge Nicaise, and Luc Paquet. A refined mixed finite-element method for the stationary Navier–Stokes equations with mixed boundary conditions. *IMA Journal of Numerical Analysis*, 28(1):25–45, January 2008. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/25>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/25>.

Farmer:1985:MPM

- [944] C. L. Farmer. A moving point method for arbitrary Peclet number multi-dimensional convection-diffusion equations. *IMA Journal of Numerical Analysis*, 5(4):465–480, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Farouki:2015:SPI

- [945] Rida T. Farouki, Carla Manni, Maria Lucia Sampoli, and Alessandra Sestini. Shape-preserving interpolation of spatial data by Pythagorean-hodograph quintic spline curves. *IMA Journal of Numerical Analysis*, 35(1):478–498, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/478>.

Farouki:2003:SPI

- [946] Rida T. Farouki, Carla Manni, and Alessandra Sestini. Shape-preserving interpolation by G^1 and G^2 PH quintic splines. *IMA Journal of Numerical Analysis*, 23(2):175–195, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230175.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230175.pdf.

Farouki:2016:TPS

- [947] Rida T. Farouki, Francesca Pelosi, Maria Lucia Sampoli, and Alessandra Sestini. Tensor-product surface patches with Pythagorean-hodograph isoparametric curves. *IMA Journal of Numerical Analysis*, 36(3):1389–1409, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1389>.

Farrell:2017:MID

- [948] Patricio Farrell, Kathryn Gillow, and Holger Wendland. Multilevel interpolation of divergence-free vector fields. *IMA Journal of Numerical Analysis*, 37(1):332–353, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/332/2669938/Multilevel-interpolation-of-divergence-free-vector>.

Farrell:2022:RMM

- [949] Patrick E. Farrell, Lawrence Mitchell, L. Ridgway Scott, and Florian Wechsung. Robust multigrid methods for nearly incompressible elasticity using macro elements. *IMA Journal of Numerical Analysis*, 42(4):3306–3329, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3306/6498280>.

Farrell:1987:SCU

- [950] Paul A. Farrell. Sufficient conditions for uniform convergence of a class of difference schemes for a singularly per-

turbed problem. *IMA Journal of Numerical Analysis*, 7(4):459–472, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fasi:2022:DIS

- [951] Massimiliano Fasi and Bruno Iannazzo. The dual inverse scaling and squaring algorithm for the matrix logarithm. *IMA Journal of Numerical Analysis*, 42(3):2829–2851, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2829/6378634>.

Fasino:1999:DMS

- [952] Dario Fasino and Gabriele Inglese. Discrete methods in the study of an inverse problem for Laplace’s equation. *IMA Journal of Numerical Analysis*, 19(1):105–118, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190105.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190105.pdf.

Faul:2005:KSA

- [953] A. C. Faul, G. Goodsell, and M. J. D. Powell. A Krylov subspace algorithm for multiquadric interpolation in many dimensions. *IMA Journal of Numerical Analysis*, 25(1):1–24, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/1>; <http://imanum.oupjournals.org/cgi/reprint/25/1/1>.

Faustmann:2017:EMA

- [954] Markus Faustmann, Jens Markus Meelenk, and Dirk Praetorius. Existence of \mathcal{H} -matrix approximants to the inverse of BEM matrices: the hyper-singular integral operator. *IMA Journal of Numerical Analysis*, 37(3):1211–1244, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1211/2669983/Existence-of-mathscr-H-matrix-approximants-to-the>.

Faustmann:2025:FBC

- [955] Markus Faustmann and Alexander Rieder. FEM-BEM coupling in fractional diffusion. *IMA Journal of Numerical Analysis*, 45(2):1143–1172, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/1143/7687814>.

Favati:1999:FIM

- [956] Paola Favati and Beatrice Meini. On functional iteration methods for solving nonlinear matrix equations arising in queueing problems. *IMA Journal of Numerical Analysis*, 19(1):39–49, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190039.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190039.pdf.

Feireisl:2016:CNM

- [957] Eduard Feireisl, Trygve Karper, and Antonín Novotný. A convergent nu-

merical method for the Navier–Stokes–Fourier system. *IMA Journal of Numerical Analysis*, 36(4):1477–1535, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1477>.

Feireisl:2020:CNT

- [958] Eduard Feireisl, Mária Lukáčová-Medvidová, and Hana Mizerová. *K*-convergence as a new tool in numerical analysis. *IMA Journal of Numerical Analysis*, 40(4):2227–2255, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2227/5625677>.

Feireisl:2021:CFV

- [959] Eduard Feireisl, Mária Lukáčová-Medvidová, Hana Mizerová, and Bangwei She. On the convergence of a finite volume method for the Navier–Stokes–Fourier system. *IMA Journal of Numerical Analysis*, 41(4):2388–2422, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2388/5919186>.

Feistauer:2019:DGM

- [960] Miloslav Feistauer, Filip Roskovec, and Anna-Margarete Sändig. Discontinuous Galerkin method for an elliptic problem with nonlinear Newton boundary conditions in a polygon. *IMA Journal of Numerical Analysis*, 39(1):423–453, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/423/4656159>.

Feldstein:1986:OUS

- [961] Alan Feldstein and Peter Turner. Overflow, underflow, and severe loss of significance in floating-point addition and subtraction. *IMA Journal of Numerical Analysis*, 6(2):241–251, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Feng:1998:ADD

- [962] Xiaobing Feng. Analysis of a domain decomposition method for the nearly elastic wave equations based on mixed finite element methods. *IMA Journal of Numerical Analysis*, 18(2):229–250, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180229.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180229.pdf.

Feng:2018:AMF

- [963] Xiaobing Feng, Zhihao Ge, and Yukun Li. Analysis of a multiphysics finite element method for a poroelasticity model. *IMA Journal of Numerical Analysis*, 38(1):330–359, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/330/3078586>.

Feng:2015:ASI

- [964] Xiaobing Feng and Yukun Li. Analysis of symmetric interior penalty discontinuous Galerkin methods for the

Allen–Cahn equation and the mean curvature flow. *IMA Journal of Numerical Analysis*, 35(4):1622–1651, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1622>.

Feng:2024:HOT

- [965] Xiaobing Feng, Akash Ashirbad Panda, and Andreas Prohl. Higher order time discretization for the stochastic semi-linear wave equation with multiplicative noise. *IMA Journal of Numerical Analysis*, 44(2):836–885, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/836/7164144>.

Feng:2021:OCM

- [966] Xiaobing Feng, Andreas Prohl, and Liet Vo. Optimally convergent mixed finite element methods for the stochastic Stokes equations. *IMA Journal of Numerical Analysis*, 41(3):2280–2310, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/2280/6174314>.

Feng:2004:PEE

- [967] Xiaobing Feng and Zhenghui Xie. A priori error estimates for a coupled finite element method and mixed finite element method for a fluid–solid interaction problem. *IMA Journal of Numerical Analysis*, 24(4):671–698, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/671>; <http://imanum.oupjournals.org/cgi/reprint/24/4/671>.

Fercoq:2019:ARA

- [968] Olivier Fercoq and Zheng Qu. Adaptive restart of accelerated gradient methods under local quadratic growth condition. *IMA Journal of Numerical Analysis*, 39(4):2069–2095, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/2069/5365591>.

Fernandez:2020:SSU

- [969] Miguel A. Fernández and Mikel Landajuela. Splitting schemes and unfitted-mesh methods for the coupling of an incompressible fluid with a thin-walled structure. *IMA Journal of Numerical Analysis*, 40(2):1407–1453, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1407/5303249>.

Fernandez:2016:CEA

- [970] Miguel A. Fernández and Jimmy Mul-laert. Convergence and error analysis for a class of splitting schemes in incompressible fluid-structure interaction. *IMA Journal of Numerical Analysis*, 36(4):1748–1782, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1748>.

Ferreira:2009:LCN

- [971] Orizon P. Ferreira. Local convergence of Newton’s method in Ba-

nach space from the viewpoint of the majorant principle. *IMA Journal of Numerical Analysis*, 29(3):746–759, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/746>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/746>.

Ferreira:2012:LCN

- [972] Orizon P. Ferreira and Roberto C. M. Silva. Local convergence of Newton’s method under a majorant condition in Riemannian manifolds. *IMA Journal of Numerical Analysis*, 32(4):1696–1713, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1696.full.pdf+html>.

Ferreira:2003:ANS

- [973] Raúl Ferreira, Pablo Groisman, and Julio D. Rossi. Adaptive numerical schemes for a parabolic problem with blow-up. *IMA Journal of Numerical Analysis*, 23(3):439–463, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/drg006.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg006.pdf.

Ferriss:1985:NSD

- [974] D. H. Ferriss and D. W. Martin. Numerical solution of discrete Poisson-Neumann problems with compatible or incompatible data, with reference to flow in a circular cavity. *IMA Jour-*

nal of Numerical Analysis, 5(1):79–100, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fletcher:1985:EC

- [975] R. Fletcher. Expected conditioning. *IMA Journal of Numerical Analysis*, 5(3):247–273, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fletcher:1987:HMN

- [976] R. Fletcher and C. Xu. Hybrid methods for nonlinear least squares. *IMA Journal of Numerical Analysis*, 7(3):371–389, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fletcher:2017:ALB

- [977] Roger Fletcher. Augmented Lagrangians, box constrained QP and extensions. *IMA Journal of Numerical Analysis*, 37(4):1635–1656, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1635/3059683>.

Fliege:1999:DPS

- [978] Jörg Fliege and Ulrike Maier. The distribution of points on the sphere and corresponding cubature formulae. *IMA Journal of Numerical Analysis*, 19(2):317–334, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190317.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190317.pdf.

Floater:2006:CCS

- [979] Michael S. Floater. Chordal cubic spline interpolation is fourth-order accurate. *IMA Journal of Numerical Analysis*, 26(1):25–33, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/25>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/25>.

Floater:2024:BPN

- [980] Michael S. Floater. On best p -norm approximation of discrete data by polynomials. *IMA Journal of Numerical Analysis*, 44(5):2716–2724, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2716/7462175>.

Fonn:2015:HCA

- [981] E. Fonn, P. Grohs, and R. Hiptmair. Hyperbolic cross approximation for the spatially homogeneous Boltzmann equation. *IMA Journal of Numerical Analysis*, 35(4):1533–1567, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1533>.

Fornberg:2021:ACH

- [982] Bengt Fornberg. An algorithm for calculating Hermite-based finite difference weights. *IMA Journal of Numerical Analysis*, 41(2):801–813, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL

<http://academic.oup.com/imajna/article/41/2/801/5821103>.

Fornberg:2021:CIA

- [983] Bengt Fornberg. Contour integrals of analytic functions given on a grid in the complex plane. *IMA Journal of Numerical Analysis*, 41(2):814–825, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/814/5872831>.

Fornberg:2023:IOA

- [984] Bengt Fornberg. Infinite-order accuracy limit of finite difference formulas in the complex plane. *IMA Journal of Numerical Analysis*, 43(5):3055–3072, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/3055/6760980>.

Fornberg:2008:LPR

- [985] Bengt Fornberg, Natasha Flyer, Susan Hovde, and Cécile Piret. Locality properties of radial basis function expansion coefficients for equispaced interpolation. *IMA Journal of Numerical Analysis*, 28(1):121–142, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/121>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/121>.

Fornberg:2010:CBP

- [986] Bengt Fornberg, Natasha Flyer, and Jennifer M. Russell. Comparisons between pseudospectral and radial

basis function derivative approximations. *IMA Journal of Numerical Analysis*, 30(1):149–172, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/149>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/149>.

Fortunato:2020:FPS

- [987] Daniel Fortunato and Alex Townsend. Fast Poisson solvers for spectral methods. *IMA Journal of Numerical Analysis*, 40(3):1994–2018, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1994/5621364>.

Foucart:2017:BCA

- [988] Simon Foucart and Vladlena Powers. Basc: constrained approximation by semidefinite programming. *IMA Journal of Numerical Analysis*, 37(2):1066–1085, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/1066/2884284/Basc-constrained-approximation-by-semidefinite>.

Fox:1981:NSI

- [989] L. Fox and D. F. Mayers. On the numerical solution of implicit ordinary differential equations. *IMA Journal of Numerical Analysis*, 1(4):377–401, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Franca:2002:SRF

- [990] Leopoldo P. Franca and Lutz Tobiska. Stability of the residual free

bubble method for bilinear finite elements on rectangular grids. *IMA Journal of Numerical Analysis*, 22(1):73–87, January 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220073.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220073.pdf.

Frank:2001:PIE

- [991] J. E. Frank and P. J. Van Der Houwen. Parallel iteration of the extended backward differentiation formulas. *IMA Journal of Numerical Analysis*, 21(1):367–385, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210367.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210367.pdf.

Frankel:1999:NTT

- [992] J. I. Frankel and G. E. Osborne. A new time treatment for solving partial integro-differential equations of radiative transport. *IMA Journal of Numerical Analysis*, 19(1):91–103, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190091.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190091.pdf.

Franz:2024:PPI

- [993] Sebastian Franz. Post-processing and improved error estimates of numerical methods for evolutionary systems. *IMA Journal of Numerical Analysis*, 44(5):

2936–2958, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2936/7330778>.

Franz:2018:GDS

- [994] Sebastian Franz, Katharina Höhne, and Gunar Matthies. Grad-div stabilized discretizations on S -type meshes for the Oseen problem. *IMA Journal of Numerical Analysis*, 38(1):299–329, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/299/3091689>.

Franz:2019:NMC

- [995] Sebastian Franz, Sascha Trostorff, and Marcus Waurick. Numerical methods for changing type systems. *IMA Journal of Numerical Analysis*, 39(2):1009–1038, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/1009/4913313>.

Franz:2023:MQI

- [996] Tino Franz and Holger Wendland. Multilevel quasi-interpolation. *IMA Journal of Numerical Analysis*, 43(5):2934–2964, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2934/6760979>.

Frasca-Caccia:2020:SBP

- [997] Gianluca Frasca-Caccia and Peter Ellsworth Hydon. Simple bespoke preservation of two conservation laws. *IMA Journal of Numerical Analysis*, 40

(2):1294–1329, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1294/5239992>.

Freire:1999:NCD

- [998] E. Freire, L. Pizarro, and A. J. Rodríguez-Luis. Numerical continuation of degenerate homoclinic orbits in planar systems. *IMA Journal of Numerical Analysis*, 19(1):51–75, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190051.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190051.pdf.

Freitag:2008:TPI

- [999] Melina A. Freitag and Alastair Spence. A tuned preconditioner for inexact inverse iteration applied to Hermitian eigenvalue problems. *IMA Journal of Numerical Analysis*, 28(3):522–551, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/522>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/522>.

French:1994:LTB

- [1000] Donald A. French and Søren Jensen. Long-time behaviour of arbitrary order continuous time Galerkin schemes for some one-dimensional phase transition problems. *IMA Journal of Numerical Analysis*, 14(3):421–442, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Frerichs:2022:DPR

- [1001] Derk Frerichs and Christian Merdon. Divergence-preserving reconstructions on polygons and a really pressure-robust virtual element method for the Stokes problem. *IMA Journal of Numerical Analysis*, 42(1):597–619, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/597/5956495>.

Frittelli:2019:PIP

- [1002] Massimo Frittelli, Anotida Madzvamuse, Ivonne Sgura, and Chandrasekhar Venkataraman. Preserving invariance properties of reaction-diffusion systems on stationary surfaces. *IMA Journal of Numerical Analysis*, 39(1):235–270, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/235/4568335>.

Fritz:2013:IFE

- [1003] H. Fritz. Isoparametric finite element approximation of Ricci curvature. *IMA Journal of Numerical Analysis*, 33(4):1265–1290, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1265.full.pdf+html>.

Froese:2017:NMH

- [1004] Brittany D. Froese, Adam M. Oberman, and Tiago Salvador. Numerical methods for the 2-Hessian elliptic partial differential equation.

IMA Journal of Numerical Analysis, 37(1):209–236, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/209/2669939/Numerical-methods-for-the-2-Hessian-elliptic>.

Fu:2019:PFS

- [1005] Guosheng Fu, Yanyi Jin, and Weifeng Qiu. Parameter-free superconvergent H(div)-conforming HDG methods for the Brinkman equations. *IMA Journal of Numerical Analysis*, 39(2):957–982, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/957/4857166>.

Fu:2023:UBD

- [1006] Guosheng Fu and Wenzheng Kuang. Uniform block-diagonal preconditioners for divergence-conforming HDG methods for the generalized Stokes equations and the linear elasticity equations. *IMA Journal of Numerical Analysis*, 43(3):1718–1741, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1718/6609533>.

Fu:2023:TPL

- [1007] Zhenwu Fu, Wei Wang, Bo Han, and Yong Chen. Two-point Landweber-type method with convex penalty terms for nonsmooth nonlinear inverse problems. *IMA Journal of Numerical Analysis*, 43(2):1115–1148, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL

<http://academic.oup.com/imajna/article/43/2/1115/6570842>.

Fuchs:1993:GNR

- [1008] P. M. Fuchs. A global negative result on algebraic stability and a special positive result on linear stability of generalized IRK methods. *IMA Journal of Numerical Analysis*, 13(4):571–589, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fuhrer:2021:E

- [1009] Thomas Führer, Alexander Haberl, and Norbert Heuer. Erratum to: “Trace operators of the bi-Laplacian and applications”. *IMA Journal of Numerical Analysis*, 41(1):800, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/800/5875243>.

Fuhrer:2021:TOB

- [1010] Thomas Führer, Alexander Haberl, and Norbert Heuer. Trace operators of the bi-Laplacian and applications. *IMA Journal of Numerical Analysis*, 41(2):1031–1055, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1031/5823798>.

Fuhrer:2018:DMS

- [1011] Thomas Führer, Norbert Heuer, and Ernst P. Stephan. On the DPG method for Signorini problems. *IMA Journal of Numerical Analysis*, 38(4):1893–1926, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1893/4260989>.

academic.oup.com/imajna/article/38/4/1893/4260989.

Fulton:2014:ESD

- [1012] Charles Fulton, David Pearson, and Steven Pruess. Estimating spectral density functions for Sturm–Liouville problems with two singular endpoints. *IMA Journal of Numerical Analysis*, 34(2):609–650, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/609.full.pdf+html>.

Funaro:1990:CAP

- [1013] Daniele Funaro. Convergence analysis for pseudospectral multidomain approximations of linear advection equations. *IMA Journal of Numerical Analysis*, 10(1):63–74, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fuselier:2017:RBF

- [1014] Edward J. Fuselier and Grady B. Wright. A radial basis function method for computing Helmholtz–Hodge decompositions. *IMA Journal of Numerical Analysis*, 37(2):774–797, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/774/2669992/A-radial-basis-function-method-for-computing>.

Gabriel:2010:NAM

- [1015] J. Rigoberto Gabriel, Juan González-Hernández, and Raquiel R. López-Martínez. Numerical approximations to the mass transfer problem on

- compact spaces. *IMA Journal of Numerical Analysis*, 30(4):1121–1136, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1121.full.pdf+html>.
- Gaier:1987:CTN**
- [1016] D. Gaier and N. Papamichael. On the comparison of two numerical methods for conformal mapping. *IMA Journal of Numerical Analysis*, 7(3):261–282, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Galkowski:2024:LAB**
- [1017] Jeffrey Galkowski, David Lafontaine, and Euan A. Spence. Local absorbing boundary conditions on fixed domains give order-one errors for high-frequency waves. *IMA Journal of Numerical Analysis*, 44(4):1946–2069, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/1946/7261400>.
- Gallistl:2015:MFE**
- [1018] Dietmar Gallistl. Morley finite element method for the eigenvalues of the biharmonic operator. *IMA Journal of Numerical Analysis*, 35(4):1779–1811, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1779>.
- Gallouet:2016:EEN**
- [1019] Thierry Gallouët, Raphaële Herbin, David Maltese, and Antonin Novotny. Error estimates for a numerical approximation to the compressible barotropic Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 36(2):543–592, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/543>.
- Gallouet:2022:CMG**
- [1020] Thierry Gallouët and Olivier Hurisse. Convergence of a multidimensional Glimm-like scheme for the transport of fronts. *IMA Journal of Numerical Analysis*, 42(4):2924–2958, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/2924/6328431>.
- Ganesh:2012:CAP**
- [1021] M. Ganesh, S. C. Hawkins, and R. Hiptmair. Convergence analysis with parameter estimates for a reduced basis acoustic scattering T -matrix method. *IMA Journal of Numerical Analysis*, 32(4):1348–1374, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1348.full.pdf+html>.
- Ganesh:1991:NSH**
- [1022] M. Ganesh and M. C. Joshi. Numerical solvability of Hammerstein integral equations of mixed type. *IMA Journal of Numerical Analysis*, 11(1):21–31, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Ganesh:1998:OCN**
- [1023] M. Ganesh and A. Spence. Orthogonal collocation for a nonlinear

- integro-differential equation. *IMA Journal of Numerical Analysis*, 18(2): 191–206, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180191.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180191.pdf.
- Gantner:2018:ROA**
- [1024] Gregor Gantner, Alexander Haberl, Dirk Praetorius, and Bernhard Stifter. Rate optimal adaptive FEM with inexact solver for nonlinear operators. *IMA Journal of Numerical Analysis*, 38(4):1797–1831, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1797/4158785>.
- Gantner:2022:PCA**
- [1025] Gregor Gantner and Dirk Praetorius. Plain convergence of adaptive algorithms without exploiting reliability and efficiency. *IMA Journal of Numerical Analysis*, 42(2): 1434–1453, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1434/6157013>.
- Gantner:2024:AST**
- [1026] Gregor Gantner and Rob Stevenson. Applications of a space-time FOSLS formulation for parabolic PDEs. *IMA Journal of Numerical Analysis*, 44(1):58–82, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/58/7074505>.
- Gao:2021:OEE**
- [1027] Huadong Gao, Weiwei Sun, and Chengda Wu. Optimal error estimates and recovery technique of a mixed finite element method for nonlinear thermistor equations. *IMA Journal of Numerical Analysis*, 41(4): 3175–3200, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/3175/5899590>.
- Garau:2011:CQO**
- [1028] Eduardo M. Garau and Pedro Morin. Convergence and quasi-optimality of adaptive FEM for Steklov eigenvalue problems. *IMA Journal of Numerical Analysis*, 31(3):914–946, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/914.full.pdf+html>.
- Garay:1998:DFD**
- [1029] Barnabas M. Garay. The discretized flow on domains of attraction: a structural stability result. *IMA Journal of Numerical Analysis*, 18(1): 77–90, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180077.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180077.pdf.
- Garay:2001:NFB**
- [1030] Barnabas M. Garay and Peter L. Simon. Numerical flow-box theorems under structural assumptions. *IMA Journal of Numerical Analysis*, 21(3):

733–749, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210733.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210733.pdf.

Garcia:2017:FES

- [1031] Carlos García, Gabriel N. Gatica, and Salim Meddahi. Finite element semidiscretization of a pressure-stress formulation for the time-domain fluid-structure interaction problem. *IMA Journal of Numerical Analysis*, 37(4):1772–1799, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1772/3038030>.

Garcia-Archilla:1995:ASC

- [1032] B. García-Archilla and J. A. Mackenzie. Analysis of a supraconvergent cell vertex finite-volume method for one-dimensional convection-diffusion problems. *IMA Journal of Numerical Analysis*, 15(1):101–115, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Garcia-Archilla:1995:TIN

- [1033] Bosco García-Archilla and Javier de Frutos. Time integration of the nonlinear Galerkin method. *IMA Journal of Numerical Analysis*, 15(2):221–244, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Garcia-Archilla:2021:SPS

- [1034] Bosco García-Archilla, Volker John, and Julia Novo. Symmetric pressure

stabilization for equal-order finite element approximations to the time-dependent Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 41(2):1093–1129, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1093/5861575>.

Garcia-Archilla:2023:REB

- [1035] Bosco García-Archilla and Julia Novo. Robust error bounds for the Navier–Stokes equations using implicit-explicit second-order BDF method with variable steps. *IMA Journal of Numerical Analysis*, 43(5):2892–2933, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2892/6748175>.

Garcia-Archilla:2025:PCR

- [1036] Bosco García-Archilla and Julia Novo. Pressure and convection robust bounds for continuous interior penalty divergence-free finite element methods for the incompressible Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 45(1):163–187, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/163/7595895>.

Garcke:2021:SPD

- [1037] Harald Garcke and Robert Nürnberg. Structure-preserving discretizations of gradient flows for axisymmetric two-phase biomembranes. *IMA Journal of Numerical Analysis*, 41(3):1899–1940, July 2021. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/1899/5863415>.

Gardini:2018:VEM

- [1038] Francesca Gardini and Giuseppe Vacca. Virtual element method for second-order elliptic eigenvalue problems. *IMA Journal of Numerical Analysis*, 38(4):2026–2054, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2026/4602859>.

Garralda-Guillem:2014:PEA

- [1039] Ana I. Garralda-Guillem, Manuel Ruiz Galán, Gabriel N. Gatica, and Antonio Márquez. A posteriori error analysis of twofold saddle point variational formulations for nonlinear boundary value problems. *IMA Journal of Numerical Analysis*, 34(1):326–361, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/326.full.pdf+html>.

Gartland:1989:CHO

- [1040] Eugene C. Gartland, Jr. Compact high-order finite differences for interface problems in one dimension. *IMA Journal of Numerical Analysis*, 9(2):243–260, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Gasperini:2023:ASD

- [1041] D. Gasperini, H-P. Beise, U. Schroeder, X. Antoine, and C. Geuzaine. An analysis of the steepest descent method

to efficiently compute the three-dimensional acoustic single-layer operator in the high-frequency regime. *IMA Journal of Numerical Analysis*, 43(3):1831–1854, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1831/6678755>.

Gaspoz:2016:OGN

- [1042] Fernando D. Gaspoz, Claus-Justus Heine, and Kunibert G. Siebert. Optimal grading of the newest vertex bisection and H^1 -stability of the L_2 -projection. *IMA Journal of Numerical Analysis*, 36(3):1217–1241, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1217>.

Gaspoz:2009:CRA

- [1043] Fernando D. Gaspoz and Pedro Morin. Convergence rates for adaptive finite elements. *IMA Journal of Numerical Analysis*, 29(4):917–936, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/917>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/917>.

Gaspoz:2019:CTS

- [1044] Fernando D. Gaspoz, Kunibert Siebert, Christian Kreuzer, and Daniel A. Ziegler. A convergent time-space adaptive $dG(s)$ finite element method for parabolic problems motivated by equal error distribution. *IMA Journal of Numerical Analysis*, 39(2):650–

686, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/650/4960122>.

Gass:2019:PIM

- [1045] Maximilian Gaß and Kathrin Glau. Parametric integration by magic point empirical interpolation. *IMA Journal of Numerical Analysis*, 39(1):315–341, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/315/4774576>.

Gastaldi:1994:DDT

- [1046] Fabio Gastaldi and Lucia Gastaldi. On a domain decomposition for the transport equation: theory and finite element approximation. *IMA Journal of Numerical Analysis*, 14(1):111–135, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Gastaldo:2011:DPM

- [1047] Laura Gastaldo, Raphaële Herbin, and Jean-Claude Latché. A discretization of the phase mass balance in fractional step algorithms for the drift-flux model. *IMA Journal of Numerical Analysis*, 31(1):116–146, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/116.full.pdf+html>.

Gatica:2003:NAN

- [1048] Gabriel N. Gatica, Norbert Heuer, and Salim Meddahi. On the numerical analysis of nonlinear twofold

saddle point problems. *IMA Journal of Numerical Analysis*, 23(2):301–330, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230301.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230301.pdf.

Gatica:2012:FEA

- [1049] Gabriel N. Gatica and Salim Meddahi. Finite element analysis of a time harmonic Maxwell problem with an impedance boundary condition. *IMA Journal of Numerical Analysis*, 32(2):534–552, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/534.full.pdf+html>.

Gatica:2009:CMF

- [1050] Gabriel N. Gatica, Salim Meddahi, and Ricardo Oyarzúa. A conforming mixed finite-element method for the coupling of fluid flow with porous media flow. *IMA Journal of Numerical Analysis*, 29(1):86–108, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Gatica:2022:SBF

- [1051] Gabriel N. Gatica, Salim Meddahi, and Ricardo Ruiz-Baier. An L^p spaces-based formulation yielding a new fully mixed finite element method for the coupled Darcy and heat equations. *IMA Journal of Numerical Analysis*, 42(4):3154–3206, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://>

academic.oup.com/imajna/article/42/4/3154/6368060.

Gatica:2012:TSP

- [1052] Gabriel N. Gatica, Ricardo Oyarzúa, and Francisco-Javier Sayas. A twofold saddle point approach for the coupling of fluid flow with nonlinear porous media flow. *IMA Journal of Numerical Analysis*, 32(3):845–887, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/845.full.pdf+html>.

Gauckler:2011:CSS

- [1053] Ludwig Gauckler. Convergence of a split-step Hermite method for the Gross–Pitaevskii equation. *IMA Journal of Numerical Analysis*, 31(2):396–415, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/396.full.pdf+html>.

Gauckler:2017:NLT

- [1054] Ludwig Gauckler. Numerical long-time energy conservation for the nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 37(4):2067–2090, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2067/2670309>.

Gavrilyuk:2007:ECP

- [1055] I. P. Gavrilyuk, A. V. Klimenko, V. L. Makarov, and N. O. Rossokhata. Exponentially convergent parallel algorithm for nonlinear eigenvalue prob-

lems. *IMA Journal of Numerical Analysis*, 27(4):818–838, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/818>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/818>.

Gazca-Orozco:2025:SCD

- [1056] Pablo Alexei Gazca-Orozco and Alex Kaltenbach. On the stability and convergence of discontinuous Galerkin schemes for incompressible flows. *IMA Journal of Numerical Analysis*, 45(1):243–282, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/243/7639902>.

Geevers:2023:FML

- [1057] Sjoerd Geevers and Roland Maier. Fast mass lumped multiscale wave propagation modelling. *IMA Journal of Numerical Analysis*, 43(1):44–72, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/44/6432386>.

Gensun:2005:CDR

- [1058] Fang Gensun and Ye Peixin. Complexity of deterministic and randomized methods for multivariate integration problems for the class $H_p^\Lambda(I^d)$. *IMA Journal of Numerical Analysis*, 25(3):473–485, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/473>; <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/473>.

oxfordjournals.org/cgi/reprint/
25/3/473.

Georgoulis:2019:PEB

- [1059] Emmanuil H. Georgoulis, Edward Hall, and Charalambos Makridakis. An a posteriori error bound for discontinuous Galerkin approximations of convection-diffusion problems. *IMA Journal of Numerical Analysis*, 39(1):34–60, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/34/4772755>.

Georgoulis:2009:DGM

- [1060] Emmanuil H. Georgoulis and Paul Houston. Discontinuous Galerkin methods for the biharmonic problem. *IMA Journal of Numerical Analysis*, 29(3):573–594, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/573>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/573>.

Georgoulis:2011:PEI

- [1061] Emmanuil H. Georgoulis, Paul Houston, and Juha Virtanen. An a posteriori error indicator for discontinuous Galerkin approximations of fourth-order elliptic problems. *IMA Journal of Numerical Analysis*, 31(1):281–298, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/281.full.pdf+html>.

Georgoulis:2013:PEB

- [1062] Emmanuil H. Georgoulis, Omar Lakkis, and Charalambos Makridakis. A posteriori $L^\infty(L^2)$ -error bounds for finite element approximations to the wave equation. *IMA Journal of Numerical Analysis*, 33(4):1245–1264, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1245.full.pdf+html>.

Georgoulis:2006:NDV

- [1063] Emmanuil H. Georgoulis and Andris Lasis. A note on the design of hp -version interior penalty discontinuous Galerkin finite element methods for degenerate problems. *IMA Journal of Numerical Analysis*, 26(2):381–390, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/381>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/381>.

Georgoulis:2023:LBE

- [1064] Emmanuil H. Georgoulis and Charalambos G. Makridakis. Lower bounds, elliptic reconstruction and a posteriori error control of parabolic problems. *IMA Journal of Numerical Analysis*, 43(6):3212–3242, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3212/7025976>.

Georgoulis:2005:OEE

- [1065] Emmanuil H. Georgoulis and Endre Süli. Optimal error estimates for

- the hp -version interior penalty discontinuous Galerkin finite element method. *IMA Journal of Numerical Analysis*, 25(1):205–220, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/205>; <http://imanum.oupjournals.org/cgi/reprint/25/1/205>.
- [1066] A. Gerisch. On the approximation and efficient evaluation of integral terms in PDE models of cell adhesion. *IMA Journal of Numerical Analysis*, 30(1):173–194, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/173>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/173>.
- [1067] C. Gerrard and K. Wright. Asymptotic properties of collocation matrix norms. II. Piecewise polynomial approximation. *IMA Journal of Numerical Analysis*, 4(3):363–373, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- [1068] Jean-Jacques Gervais and Hassan Sadiky. A new steplength control for continuation with the asymptotic numerical method. *IMA Journal of Numerical Analysis*, 22(2):207–229, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220207.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220207.pdf.
- Ghelardoni:2003:NSR**
- [1069] P. Ghelardoni, G. Gheri, and M. Marletta. Numerical solution of a λ -rational Sturm–Liouville problem. *IMA Journal of Numerical Analysis*, 23(1):29–53, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230029.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230029.pdf.
- Ghosh:2016:FBF**
- [1070] Aditi Ghosh and Prabir Daripa. The FFTRR-based fast decomposition methods for solving complex biharmonic problems and incompressible flows. *IMA Journal of Numerical Analysis*, 36(2):824–850, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/824>.
- Gibbs:2021:HFB**
- [1071] Andrew Gibbs, Simon N. Chandler-Wilde, Stephen Langdon, and Andrea Moiola. A high-frequency boundary element method for scattering by a class of multiple obstacles. *IMA Journal of Numerical Analysis*, 41(2):1197–1225, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1197/5874885>.
- Gerrard:1984:APC**
- Gervais:2002:NSC**

Giesselmann:2015:LMA

- [1072] Jan Giesselmann. Low Mach asymptotic-preserving scheme for the Euler–Korteweg model. *IMA Journal of Numerical Analysis*, 35(2):802–833, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/802>.

Giesselmann:2016:RRE

- [1073] Jan Giesselmann and Tristan Pryer. Reduced relative entropy techniques for a posteriori analysis of multiphase problems in elastodynamics. *IMA Journal of Numerical Analysis*, 36(4):1685–1714, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1685>.

Gil:2011:FAC

- [1074] Amparo Gil, Javier Segura, and Nico M. Temme. Fast and accurate computation of the Weber parabolic cylinder function $W(a, x)$. *IMA Journal of Numerical Analysis*, 31(3):1194–1216, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1194.full.pdf+html>.

Gilbert:2024:MQMa

- [1075] Alexander D. Gilbert and Robert Scheichl. Multilevel quasi-Monte Carlo for random elliptic eigenvalue problems I: regularity and error analysis. *IMA Journal of Numerical Analysis*, 44(1):466–503, January 2024. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/466/7189981>.

Gilbert:2024:MQMb

- [1076] Alexander D. Gilbert and Robert Scheichl. Multilevel quasi-Monte Carlo for random elliptic eigenvalue problems II: efficient algorithms and numerical results. *IMA Journal of Numerical Analysis*, 44(1):504–535, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/504/7165317>.

Gilbert:1990:ESI

- [1077] J. Gilbert and W. A. Light. Envelope solutions for implicit ordinary differential equations. *IMA Journal of Numerical Analysis*, 10(1):49–61, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Giles:1997:SCD

- [1078] M. B. Giles. On the stability and convergence of discretizations of initial value p.d.e.s. *IMA Journal of Numerical Analysis*, 17(4):563–576, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170563.sgm.abs.html.

Gill:2017:SSM

- [1079] Philip E. Gill, Vyacheslav Kungurtsev, and Daniel P. Robinson. A stabilized SQP method: global convergence. *IMA Journal of Numerical Analysis*, 37(1):407–443, January 1, 2017. CODEN IJNADH. ISSN

0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/407/2669936/A-stabilized-SQP-method-global-convergence>.

Giraud:2002:WMG

- [1080] L. Giraud and J. Langou. When modified Gram–Schmidt generates a well-conditioned set of vectors. *IMA Journal of Numerical Analysis*, 22(4): 521–528, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220521.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220521.pdf.

Giraud:1999:SCP

- [1081] Luc Giraud and Ray S. Tuminaro. Schur complement preconditioners for anisotropic problems. *IMA Journal of Numerical Analysis*, 19(1): 1–18, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190001.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190001.pdf.

Girault:2004:DDM

- [1082] V. Girault, R. Glowinski, and H. López. A domain decomposition and mixed method for a linear parabolic boundary value problem. *IMA Journal of Numerical Analysis*, 24(3):491–520, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240491.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240491.pdf.

[//www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240491.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240491.pdf).

Girault:1996:FEE

- [1083] V. Girault and H. Lopez. Finite-element error estimates for the MAC scheme. *IMA Journal of Numerical Analysis*, 16(3):347–379, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160347.sgm.abs.html.

Girault:2022:AEP

- [1084] Vivette Girault, Olivier Pironneau, and Po-Yi Wu. Analysis of an electroless plating problem. *IMA Journal of Numerical Analysis*, 42(4):2884–2923, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/2884/6414066>.

Gittelsohn:2012:RGF

- [1085] Claude Jeffrey Gittelsohn. Representation of Gaussian fields in series with independent coefficients. *IMA Journal of Numerical Analysis*, 32(1):294–319, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/294.full.pdf+html>.

Gladwell:1990:EMS

- [1086] I. Gladwell and R. M. Thomas. Efficiency of methods for second-order problems. *IMA Journal of Numerical Analysis*, 10(2):181–207, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Glaister:1988:SRP

- [1087] P. Glaister. A shock-reflection problem in compressible-gas dynamics with a similarity solution. *IMA Journal of Numerical Analysis*, 8(3):343–356, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Glaubitz:2023:CAP

- [1088] Jan Glaubitz. Construction and application of provable positive and exact cubature formulas. *IMA Journal of Numerical Analysis*, 43(3):1616–1652, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1616/6586010>.

Glowinski:1984:FEA

- [1089] R. Glowinski, L. D. Marini, and M. Vidrascu. Finite-element approximations and iterative solutions of a fourth-order elliptic variational inequality. *IMA Journal of Numerical Analysis*, 4(2):127–167, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Glunt:1995:APM

- [1090] William K. Glunt. An alternating projections method for certain linear problems in a Hilbert space. *IMA Journal of Numerical Analysis*, 15(2):291–305, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

GmeligMeyling:1987:BSA

- [1091] R. H. J. Gmelig Meyling and P. R. Pfluger. B-spline approximation of a closed surface. *IMA Journal of Numerical Analysis*, 7(1):73–96, 1987.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Goda:2020:REA

- [1092] Takashi Goda. Richardson extrapolation allows truncation of higher-order digital nets and sequences. *IMA Journal of Numerical Analysis*, 40(3):2052–2075, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/2052/5437532>.

Goda:2017:OOQ

- [1093] Takashi Goda, Kosuke Suzuki, and Takehito Yoshiki. Optimal order quasi-Monte Carlo integration in weighted Sobolev spaces of arbitrary smoothness. *IMA Journal of Numerical Analysis*, 37(1):505–518, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/505/2669950/Optimal-order-quasi-Monte-Carlo-integration-in>.

Goldfarb:2008:NSF

- [1094] D. Goldfarb and K. Scheinberg. Numerically stable LDL^T factorizations in interior point methods for convex quadratic programming. *IMA Journal of Numerical Analysis*, 28(4):806–826, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/806>.

Golub:2009:QAY

- [1095] Gene Golub and Frank Uhlig. The QR algorithm: 50 years later its genesis by

- John Francis and Vera Kublanovskaya and subsequent developments. *IMA Journal of Numerical Analysis*, 29(3): 467–485, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/467>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/467>.
- [1096] Antônio Tadeu A. Gomes, Wesley S. Pereira, and Frédéric Valentin. The MHM method for linear elasticity on polytopal meshes. *IMA Journal of Numerical Analysis*, 43(4):2265–2298, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2265/6674195>.
- [1097] Shihua Gong, Ivan G. Graham, and Euan A. Spence. Domain decomposition preconditioners for high-order discretizations of the heterogeneous Helmholtz equation. *IMA Journal of Numerical Analysis*, 41(3): 2139–2185, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/2139/6030100>.
- [1098] Wei Gong and Buyang Li. Improved error estimates for semidiscrete finite element solutions of parabolic Dirichlet boundary control problems. *IMA Journal of Numerical Analysis*, 40(4): 2898–2939, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2898/5543027>.
- [1099] Wei Gong, Buyang Li, and Qiqi Rao. Convergent evolving boundary approximations of boundary evolution under shape gradient flow. *IMA Journal of Numerical Analysis*, 44(5): 2667–2697, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2667/7329551>.
- [1100] Wei Gong, Wenbin Liu, Zhiyu Tan, and Ningning Yan. A convergent adaptive finite element method for elliptic Dirichlet boundary control problems. *IMA Journal of Numerical Analysis*, 39(4):1985–2015, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1985/5068728>. See corrigendum [1101].
- [1101] Wei Gong, Wenbin Liu, Zhiyu Tan, and Ningning Yan. Corrigendum to: A convergent adaptive finite element method for elliptic Dirichlet boundary control problems. *IMA Journal of Numerical Analysis*, 40(1):800, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/800/5114643>. See [1100].

Gong:2024:CEF

Gomes:2023:MML

Gong:2019:CAF

Gong:2021:DDP

Gong:2020:CCA

Gong:2020:IEE

Gonon:2022:UEE

- [1102] Lukas Gonon, Philipp Grohs, Arnulf Jentzen, David Kofler, and David Siska. Uniform error estimates for artificial neural network approximations for heat equations. *IMA Journal of Numerical Analysis*, 42(3):1991–2054, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/1991/6279436>.

Gonzalez:1999:QPM

- [1103] O. Gonzalez, D. J. Higham, and A. M. Stuart. Qualitative properties of modified equations. *IMA Journal of Numerical Analysis*, 19(2):169–190, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190169.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190169.pdf.

Goodman:1998:LPA

- [1104] Tim N. T. Goodman, Charles A. Micchelli, Giuseppe Rodriguez, and Sebastiano Seatzu. On the limiting profile arising from orthonormalizing shifts of exponentially decaying functions. *IMA Journal of Numerical Analysis*, 18(3):331–354, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180331.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180331.pdf.

Goodsell:1997:MTM

- [1105] George Goodsell. A multigrid-type

method for thin plate spline interpolation on a circle. *IMA Journal of Numerical Analysis*, 17(2):321–327, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170321.sgm.abs.html.

Gopalakrishnan:2012:SEE

- [1106] J. Gopalakrishnan and J. Guzmán. A second elasticity element using the matrix bubble. *IMA Journal of Numerical Analysis*, 32(1):352–372, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/352.full.pdf+html>.

Gopalakrishnan:2020:MCM

- [1107] Jay Gopalakrishnan, Philip L. Lederer, and Joachim Schöberl. A mass conserving mixed stress formulation for the Stokes equations. *IMA Journal of Numerical Analysis*, 40(3):1838–1874, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1838/5485875>.

Gordon:2012:SSC

- [1108] Andrew D. Gordon and Catherine E. Powell. On solving stochastic collocation systems with algebraic multigrid. *IMA Journal of Numerical Analysis*, 32(3):1051–1070, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1051.full.pdf+html>.

Gorynina:2019:TSA

- [1109] Olga Gorynina, Alexei Lozinski, and Marco Picasso. Time and space adaptivity of the wave equation discretized in time by a second-order scheme. *IMA Journal of Numerical Analysis*, 39(4):1672–1705, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1672/5058939>.

Goudon:2022:TCD

- [1110] Thierry Goudon, Stella Krell, Julie Llobell, and Sebastian Minjeaud. Transfer of conservative discrete differential operators between staggered grids: construction and duality relations. *IMA Journal of Numerical Analysis*, 42(3):2459–2504, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2459/6299940>.

Gould:1991:ALS

- [1111] Nicholas I. M. Gould. An algorithm for large-scale quadratic programming. *IMA Journal of Numerical Analysis*, 11(3):299–324, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Gould:2012:SDS

- [1112] Nicholas I. M. Gould and Daniel P. Robinson. A second-derivative SQP method with a ‘trust-region-free’ predictor step. *IMA Journal of Numerical Analysis*, 32(2):580–601, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/580.full.pdf+html>.

[oxfordjournals.org/content/32/2/580.full.pdf+html](http://imajna.oxfordjournals.org/content/32/2/580.full.pdf+html).

Gould:1986:ADS

- [1113] Nicholas Ian Mark Gould. On the accurate determination of search directions for simple differentiable penalty functions. *IMA Journal of Numerical Analysis*, 6(3):357–372, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Gourlay:1981:LCG

- [1114] A. R. Gourlay and J. Ll. Morris. Linear combinations of generalized Crank–Nicolson schemes. *IMA Journal of Numerical Analysis*, 1(3):347–357, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Gout:1985:RWT

- [1115] J.-L. Gout. Rational Wachspress-type finite elements on regular hexagons. *IMA Journal of Numerical Analysis*, 5(1):59–77, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Govaerts:1993:MBE

- [1116] W. Govaerts and J. D. Pryce. Mixed block elimination for linear systems with wider borders. *IMA Journal of Numerical Analysis*, 13(2):161–180, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Gover:1985:ITM

- [1117] M. J. C. Gover and S. Barnett. Inversion of Toeplitz matrices which are not strongly nonsingular. *IMA Journal of Numerical Analysis*, 5(1):101–110, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Graham:2005:FED

- [1118] I. G. Graham, W. Hackbusch, and S. A. Sauter. Finite elements on degenerate meshes: inverse-type inequalities and applications. *IMA Journal of Numerical Analysis*, 25(2):379–407, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/379>; <http://imanum.oupjournals.org/cgi/reprint/25/2/379>.

Graham:1993:SIA

- [1119] Ivan G. Graham and Kendall E. Atkinson. On the Sloan iteration applied to integral equations of the first kind. *IMA Journal of Numerical Analysis*, 13(1):29–41, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Graham:1985:IGV

- [1120] Ivan G. Graham, Stephen Joe, and Ian H. Sloan. Iterated Galerkin versus iterated collocation for integral equations of the second kind. *IMA Journal of Numerical Analysis*, 5(3):355–369, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Graham:1989:NPI

- [1121] Ivan G. Graham and Wendy R. Mendes. Nyström-product integration for Wiener-Hopf equations with applications to radiative transfer. *IMA Journal of Numerical Analysis*, 9(2):261–284, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Graham:2021:EAU

- [1122] Ivan G. Graham, Matthew J. Parkinson, and Robert Scheichl. Error analysis and uncertainty quantification for the heterogeneous transport equation in slab geometry. *IMA Journal of Numerical Analysis*, 41(4):2331–2361, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2331/5882121>.

Grant:1983:DZL

- [1123] J. A. Grant and A. Ghiatis. Determination of the zeros of a linear combination of Chebyshev polynomials. *IMA Journal of Numerical Analysis*, 3(2):193–206, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Grapiglia:2021:CAL

- [1124] Geovani Nunes Grapiglia and Ya xiang Yuan. On the complexity of an augmented Lagrangian method for nonconvex optimization. *IMA Journal of Numerical Analysis*, 41(2):1546–1568, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1546/5867668>.

Graser:2019:DEE

- [1125] Carsten Gräser and Tobias Kies. Discretization error estimates for penalty formulations of a linearized Canham-Helfrich-type energy. *IMA Journal of Numerical Analysis*, 39(2):626–649, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

(electronic). URL <http://academic.oup.com/imajna/article/39/2/626/4788734>.

Graser:2013:TDA

- [1126] Carsten Gräser, Ralf Kornhuber, and Uli Sack. Time discretizations of anisotropic Allen–Cahn equations. *IMA Journal of Numerical Analysis*, 33(4):1226–1244, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1226.full.pdf+html>.

Graser:2015:NSN

- [1127] Carsten Gräser, Ralf Kornhuber, and Uli Sack. Nonsmooth Schur–Newton methods for multicomponent Cahn–Hilliard systems. *IMA Journal of Numerical Analysis*, 35(2):652–679, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/652>.

Graser:2019:TNN

- [1128] Carsten Gräser and Oliver Sander. Truncated nonsmooth Newton multigrid methods for block-separable minimization problems. *IMA Journal of Numerical Analysis*, 39(1):454–481, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/454/5153291>.

Gratton:2023:ARM

- [1129] S. Gratton and Ph L. Toint. Adaptive regularization minimization algorithms with nonsmooth norms. *IMA*

Journal of Numerical Analysis, 43(2):920–949, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/920/6550816>.

Gratton:2025:YAF

- [1130] Serge Gratton, Sadok Jerad, and Philippe L. Toint. Yet another fast variant of Newton’s method for non-convex optimization. *IMA Journal of Numerical Analysis*, 45(2):971–1008, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/971/7732374>.

Gratton:2008:RTR

- [1131] Serge Gratton, Mélodie Mouffe, Philippe L. Toint, and Melissa Weber-Mendonça. A recursive-trust-region method for bound-constrained nonlinear optimization. *IMA Journal of Numerical Analysis*, 28(4):827–861, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/827>.

Gratton:2018:CGR

- [1132] Serge Gratton, Clément W. Royer, Luís N. Vicente, and Zaikun Zhang. Complexity and global rates of trust-region methods based on probabilistic models. *IMA Journal of Numerical Analysis*, 38(3):1579–1597, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1579/4084726>.

Graves-Morris:1984:VVR

- [1133] P. R. Graves-Morris. Vector-valued rational interpolants. II. *IMA Journal of Numerical Analysis*, 4(2):209–224, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Greenberg:1995:OTN

- [1134] Leon Greenberg and Marco Marletta. Oscillation theory and numerical solution of fourth-order Sturm–Liouville problems. *IMA Journal of Numerical Analysis*, 15(3):319–356, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Gregory:1982:PRQ

- [1135] J. A. Gregory and R. Delbourgo. Piecewise rational quadratic interpolation to monotonic data. *IMA Journal of Numerical Analysis*, 2(2):123–130, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Griebel:2014:ABV

- [1136] Michael Griebel and Helmut Harbrecht. Approximation of bi-variate functions: singular value decomposition versus sparse grids. *IMA Journal of Numerical Analysis*, 34(1):28–54, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/28.full.pdf+html>.

Griebel:2019:SVD

- [1137] Michael Griebel and Helmut Harbrecht. Singular value decomposition versus sparse grids: refined complexity estimates. *IMA Journal*

of Numerical Analysis, 39(4):1652–1671, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1652/5048349>.

Griewank:1983:CHP

- [1138] A. Griewank and G. Reddien. The calculation of Hopf points by a direct method. *IMA Journal of Numerical Analysis*, 3(3):295–303, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Griffiths:1988:SPB

- [1139] D. F. Griffiths and A. R. Mitchell. Stable periodic bifurcations of an explicit discretization of a nonlinear partial differential equation in reaction diffusion. *IMA Journal of Numerical Analysis*, 8(4):435–454, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Griffiths:1992:SAN

- [1140] D. F. Griffiths, P. K. Sweby, and H. C. Yee. On spurious asymptotic numerical solutions of explicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 12(3):319–338, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

Griffiths:2010:ARM

- [1141] David F. Griffiths and Chus (J. M.) Sanz-Serna. Andrew Ronald Mitchell. *IMA Journal of Numerical Analysis*, 30(1):1–3, January 2010. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/reprint/30/1/1>.

Grindrod:2010:PR

- [1142] Peter Grindrod, Desmond J. Higham, and Gabriela Kalna. Periodic re-ordering. *IMA Journal of Numerical Analysis*, 30(1):195–207, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/195>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/195>.

Grohs:2016:NTR

- [1143] P. Grohs and S. Hosseini. Non-smooth trust region algorithms for locally Lipschitz functions on Riemannian manifolds. *IMA Journal of Numerical Analysis*, 36(3):1167–1192, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1167>.

Grohs:2009:SIM

- [1144] Philipp Grohs. Smoothness of interpolatory multivariate subdivision in Lie groups. *IMA Journal of Numerical Analysis*, 29(3):760–772, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/760>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/760>.

Grohs:2022:DNN

- [1145] Philipp Grohs and Lukas Herrmann. Deep neural network approximation for high-dimensional elliptic PDEs with boundary conditions. *IMA Journal of Numerical Analysis*, 42(3):2055–2082, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2055/6272090>.

Grossmann:1986:FGG

- [1146] Ch. Grossmann and H.-G. Roos. Feed-back grid generation via monotone discretization for two-point boundary-value problems. *IMA Journal of Numerical Analysis*, 6(4):421–432, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Grote:2008:IPD

- [1147] Marcus J. Grote, Anna Schneebeli, and Dominik Schötzau. Interior penalty discontinuous Galerkin method for Maxwell’s equations: optimal L^2 -norm error estimates. *IMA Journal of Numerical Analysis*, 28(3):440–468, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/440>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/440>.

Grothaus:2016:NPD

- [1148] Martin Grothaus and Nicole Marheineke. On a nonlinear partial differential algebraic system arising in the technical textile industry: analysis and numerics. *IMA Journal of Numerical Analysis*, 36(4):1783–1803, Oc-

- tober 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1783>.
- Grune:2001:PAO**
- [1149] Lars Grüne. Persistence of attractors for one-step discretization of ordinary differential equations. *IMA Journal of Numerical Analysis*, 21(3):751–767, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210751.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210751.pdf.
- Gu:2021:MLM**
- [1150] Ran Gu and Qiang Du. A modified limited memory steepest descent method motivated by an inexact super-linear convergence rate analysis. *IMA Journal of Numerical Analysis*, 41(1):247–270, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/247/5819219>.
- Gu:2021:PSP**
- [1151] Ran Gu, Qiang Du, and Ya xiang Yuan. Positive semidefinite penalty method for quadratically constrained quadratic programming. *IMA Journal of Numerical Analysis*, 41(4):2488–2515, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2488/5893398>.
- Gu:2024:LIE**
- [1152] Xuelong Gu, Wenjun Cai, Yushun Wang, and Chaolong Jiang. Linearly implicit energy-preserving integrating factor methods and convergence analysis for the 2D nonlinear Schrödinger equation with wave operator. *IMA Journal of Numerical Analysis*, 44(4):2513–2549, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2513/7280454>.
- Guan:2012:ACS**
- [1153] Qingguang Guan, Ran Zhang, and Yongkui Zou. Analysis of collocation solutions for nonstandard Volterra integral equations. *IMA Journal of Numerical Analysis*, 32(4):1755–1785, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1755.full.pdf+html>.
- Gudi:2011:IPM**
- [1154] Thirupathi Gudi and Michael Neilan. An interior penalty method for a sixth-order elliptic equation. *IMA Journal of Numerical Analysis*, 31(4):1734–1753, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1734.full.pdf+html>.
- Guermond:2001:SSG**
- [1155] J.-L. Guermond. Subgrid stabilization of Galerkin approximations of linear monotone operators. *IMA Journal of Numerical Analysis*, 21(1):165–197, January 2001. CODEN IJ-

- NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210165.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210165.pdf.
- Guermond:2009:LCF**
- [1156] J.-L. Guermond. The LBB condition in fractional Sobolev spaces and applications. *IMA Journal of Numerical Analysis*, 29(3):790–805, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/790>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/790>.
- Guglielmi:2003:SOL**
- [1157] N. Guglielmi and M. Zennaro. Stability of one-leg Θ -methods for the variable coefficient pantograph equation on the quasi-geometric mesh. *IMA Journal of Numerical Analysis*, 23(3):421–438, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/drg005.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg005.pdf.
- Guglielmi:1998:DDS**
- [1158] Nicola Guglielmi. Delay dependent stability regions of Θ -methods for delay differential equations. *IMA Journal of Numerical Analysis*, 18(3):399–418, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180399.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180399.pdf.
- Guglielmi:2006:SPC**
- [1159] Nicola Guglielmi. Short proofs and a counterexample for analytical and numerical stability of delay equations with infinite memory. *IMA Journal of Numerical Analysis*, 26(1):60–77, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/60>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/60>.
- Guglielmi:2001:GPN**
- [1160] Nicola Guglielmi and Ernst Hairer. Geometric proofs of numerical stability for delay equations. *IMA Journal of Numerical Analysis*, 21(1):439–450, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210439abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210439.pdf.
- Guglielmi:2015:ARS**
- [1161] Nicola Guglielmi and Manuela Manetta. Approximating real stability radii. *IMA Journal of Numerical Analysis*, 35(3):1402–1425, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1402>.
- Guillen-Gonzalez:2011:NEE**
- [1162] F. Guillén-González and M. V. Redondo-Neble. New error esti-

mates for a viscosity-splitting scheme in time for the three-dimensional Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 31(2):556–579, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/556.full.pdf+html>.

Gunzburger:2020:LRE

- [1163] Max Gunzburger, Traian Iliescu, and Michael Schneier. A Leray regularized ensemble-proper orthogonal decomposition method for parameterized convection-dominated flows. *IMA Journal of Numerical Analysis*, 40(2):886–913, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/886/5299776>.

Gunzburger:2019:EAS

- [1164] Max Gunzburger, Nan Jiang, and Zhu Wang. An efficient algorithm for simulating ensembles of parameterized flow problems. *IMA Journal of Numerical Analysis*, 39(3):1180–1205, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1180/5001156>.

Guo:1985:SMS

- [1165] Ben Yu Guo and V. S. Manoranjan. A spectral method for solving the RLW equation. *IMA Journal of Numerical Analysis*, 5(3):307–318, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Guo:2003:QME

- [1166] Chun-Hua Guo. On a quadratic matrix equation associated with an M -matrix. *IMA Journal of Numerical Analysis*, 23(1):11–27, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230011.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230011.pdf.

Guo:2015:PED

- [1167] Chun-Hua Guo, Changli Liu, and Jungong Xue. Performance enhancement of doubling algorithms for a class of complex nonsymmetric algebraic Riccati equations. *IMA Journal of Numerical Analysis*, 35(1):270–288, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/270>.

Guo:2018:SPP

- [1168] Hailong Guo, Xu Yang, and Zhimin Zhang. Superconvergence of partially penalized immersed finite element methods. *IMA Journal of Numerical Analysis*, 38(4):2123–2144, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2123/4108202>.

Guo:2019:GIF

- [1169] Ruchi Guo and Tao Lin. A group of immersed finite-element spaces for elliptic interface problems. *IMA Journal of Numerical Analysis*, 39(1):482–511, January 25, 2019. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/482/4742251>.

Guo:1997:PEE

- [1170] Wen Guo and Martin Stynes. Pointwise error estimates for a streamline diffusion scheme on a Shishkin mesh for a convection-diffusion problem. *IMA Journal of Numerical Analysis*, 17(1): 29–59, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170029.sgm.abs.html.

Gustafsson:1984:PIM

- [1171] Ivar Gustafsson. A preconditioned iterative method for the solution of the biharmonic problem. *IMA Journal of Numerical Analysis*, 4(1):55–67, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Gutierrez:2000:NMU

- [1172] J. M. Gutierrez and M. A. Hernandez. Newton’s method under weak Kantorovich conditions. *IMA Journal of Numerical Analysis*, 20(4):521–532, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200521abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200521.pdf.

Gutknecht:2011:HWA

- [1173] Martin H. Gutknecht and Beresford N. Parlett. From qd to LR , or, how were the qd and LR al-

gorithms discovered? *IMA Journal of Numerical Analysis*, 31(3):741–754, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/741.full.pdf+html>.

Guttel:2018:RDC

- [1174] Stefan Güttel and John W. Pearson. A rational deferred correction approach to parabolic optimal control problems. *IMA Journal of Numerical Analysis*, 38(4):1861–1892, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1861/4372128>.

Guttel:2022:STN

- [1175] Stefan Güttel and John W. Pearson. A spectral-in-time Newton–Krylov method for nonlinear PDE-constrained optimization. *IMA Journal of Numerical Analysis*, 42(2): 1478–1499, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1478/6149286>.

Guzman:2014:CDF

- [1176] Johnny Guzmán and Michael Neilan. Conforming and divergence-free Stokes elements in three dimensions. *IMA Journal of Numerical Analysis*, 34(4): 1489–1508, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1489>.

Guzman:2017:CDM

- [1177] Johnny Guzmán, Chi-Wang Shu, and Filánder A. Sequeira. $H(\text{div})$ conforming and DG methods for incompressible Euler's equations. *IMA Journal of Numerical Analysis*, 37(4):1733–1771, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1733/2670304>.

Gwiazda:2023:CEM

- [1178] Piotr Gwiazda, Błażej Miasojedow, Jakub Skrzeczkowski, and Zuzanna Szymańska. Convergence of the EBT method for a non-local model of cell proliferation with discontinuous interaction kernel. *IMA Journal of Numerical Analysis*, 43(1):590–626, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/590/6513777>.

Gwiazda:2025:RCY

- [1179] Piotr Gwiazda, Jakub Skrzeczkowski, and Lara Trussardi. On the rate of convergence of Yosida approximation for the nonlocal Cahn–Hilliard equation. *IMA Journal of Numerical Analysis*, 45(1):68–86, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/68/7642323>.

Hackbusch:2009:CFL

- [1180] W. Hackbusch. Convolution of hp functions on locally refined grids. *IMA Journal of Numerical Analysis*, 29(4):960–985, Oc-

tober 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/960>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/960>.

Hackbusch:2009:SCQ

- [1181] W. Hackbusch, W. Kress, and S. A. Sauter. Sparse convolution quadrature for time domain boundary integral formulations of the wave equation. *IMA Journal of Numerical Analysis*, 29(1):158–179, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Hager:2017:LCA

- [1182] William W. Hager, Hongyan Hou, and Anil V. Rao. Lebesgue constants arising in a class of collocation methods. *IMA Journal of Numerical Analysis*, 37(4):1884–1901, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1884/2739356>.

Hahn:2024:CRB

- [1183] Bernadette N. Hahn, Gaël Rigaud, and Richard Schmähl. A class of regularizations based on nonlinear isotropic diffusion for inverse problems. *IMA Journal of Numerical Analysis*, 44(1):225–261, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/225/7057973>.

Hairer:1982:OSM

- [1184] E. Hairer. A one-step method of order 10 for $y'' = f(x, y)$. *IMA*

Journal of Numerical Analysis, 2(1): 83–94, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Hairer:2017:BSS

- [1185] Ernst Hairer and Arieh Iserles. Banded, stable, skew-symmetric differentiation matrices of high order. *IMA Journal of Numerical Analysis*, 37(3):1087–1103, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1087/2670025/Banded-stable-skew-symmetric-differentiation>.

Hairer:2014:EDI

- [1186] Ernst Hairer and Christian Lubich. Energy-diminishing integration of gradient systems. *IMA Journal of Numerical Analysis*, 34(2):452–461, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/452.full.pdf+html>.

Hairer:2013:CSS

- [1187] Ernst Hairer and Christophe J. Zbinden. On conjugate symplecticity of B -series integrators. *IMA Journal of Numerical Analysis*, 33(1):57–79, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/57.full.pdf+html>.

Hajian:2019:TVD

- [1188] Soheil Hajian, Michael Hintermüller, and Stefan Ulbrich. Total variation

diminishing schemes in optimal control of scalar conservation laws. *IMA Journal of Numerical Analysis*, 39(1): 105–140, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/105/4742250>.

Hale:2019:USM

- [1189] Nicholas Hale. An ultraspherical spectral method for linear Fredholm and Volterra integro-differential equations of convolution type. *IMA Journal of Numerical Analysis*, 39(4):1727–1746, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1727/5053817>.

Hale:2016:FFB

- [1190] Nicholas Hale and Alex Townsend. A fast FFT-based discrete Legendre transform. *IMA Journal of Numerical Analysis*, 36(4):1670–1684, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1670>.

Hall:1992:AMCb

- [1191] C. A. Hall and T. A. Porsching. Approximation methods in the computer numerically controlled fabrication of optical surfaces. I. Finite-dimensional material removal profile spaces. *IMA Journal of Numerical Analysis*, 12(1): 67–84, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Hall:1992:AMCa

- [1192] C. A. Hall and T. A. Porsching. Approximation methods in the computer numerically controlled fabrication of optical surfaces. II. Mollifications. *IMA Journal of Numerical Analysis*, 12(2):259–269, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Hall:1988:ASS

- [1193] G. Hall and Desmond Higham. Analysis of stepsize selection schemes for Runge–Kutta codes. *IMA Journal of Numerical Analysis*, 8(3):305–310, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Hall:1981:SAT

- [1194] G. Hall and M. B. Suleiman. Stability of Adams-type formulae for second-order ordinary differential equations. *IMA Journal of Numerical Analysis*, 1(4):427–438, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Halla:2023:ADE

- [1195] Martin Halla. On the approximation of dispersive electromagnetic eigenvalue problems in two dimensions. *IMA Journal of Numerical Analysis*, 43(1):535–559, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/535/6485179>.

Hamfeldt:2024:RAF

- [1196] Brittany Froese Hamfeldt and Axel G. R. Turnquist. On the reduction in accuracy of finite difference schemes

on manifolds without boundary. *IMA Journal of Numerical Analysis*, 44(3):1751–1784, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1751/7226184>.

Hammarling:1982:NSS

- [1197] S. J. Hammarling. Numerical solution of the stable, nonnegative definite Lyapunov equation. *IMA Journal of Numerical Analysis*, 2(3):303–323, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Han:1992:VPF

- [1198] Wei Min Han. The p -version penalty finite element method. *IMA Journal of Numerical Analysis*, 12(1):47–56, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Han:2023:NSE

- [1199] Weimin Han, Min Ling, and Fei Wang. Numerical solution of an $H(\text{curl})$ -elliptic hemivariational inequality. *IMA Journal of Numerical Analysis*, 43(2):976–1000, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/976/6550476>.

Han:2022:SAH

- [1200] Yongbin Han and Yanren Hou. Semi-robust analysis of an $H(\text{div})$ -conforming DG method with semi-implicit time-marching for the evolutionary incompressible Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 42(2):1568–1597, April 2022. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1568/6133991>.

Handscomb:1984:SRI

- [1201] D. C. Handscomb. Spline representation of incompressible flow. *IMA Journal of Numerical Analysis*, 4(4): 491–502, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Hansbo:2017:SFE

- [1202] Peter Hansbo and Mats G. Larson. A stabilized finite element method for the Darcy problem on surfaces. *IMA Journal of Numerical Analysis*, 37(3): 1274–1299, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1274/2670035/A-stabilized-finite-element-method-for-the-Darcy>.

Hansbo:2020:AFE

- [1203] Peter Hansbo, Mats G. Larson, and Karl Larsson. Analysis of finite element methods for vector Laplacians on surfaces. *IMA Journal of Numerical Analysis*, 40(3):1652–1701, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1652/5435894>.

Hansen:2017:ADD

- [1204] Eskil Hansen and Erik Henningson. Additive domain decomposition operator splittings-convergence analyses in a dissipative framework. *IMA Journal of Numerical Analysis*, 37(3):1496–1519, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-

3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1496/2670039/Additive-domain-decomposition-operator-splittings>.

Hansen:2010:DSQ

- [1205] Eskil Hansen and Alexander Ostermann. Dimension splitting for quasi-linear parabolic equations. *IMA Journal of Numerical Analysis*, 30(3):857–869, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/857>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/857>.

Hansen:2002:SCM

- [1206] Olaf Hansen. On the stability of the Collocation method for the Radiosity equation on polyhedral domains. *IMA Journal of Numerical Analysis*, 22(3):463–479, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220463.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220463.pdf.

Hansen:2009:NHO

- [1207] Olaf Hansen, Kendall Atkinson, and David Chien. On the norm of the hyperinterpolation operator on the unit disc and its use for the solution of the nonlinear Poisson equation. *IMA Journal of Numerical Analysis*, 29(2):257–283, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/257>; <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/257>.

oxfordjournals.org/cgi/reprint/
29/2/257.

Hare:2022:EBO

Haque:1987:CSO

- [1208] S. Haque. Convergence of the successive overrelaxation method. *IMA Journal of Numerical Analysis*, 7(3):307–311, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

- [1212] Warren Hare, Gabriel Jarry-Bolduc, and Chayne Planiden. Error bounds for overdetermined and underdetermined generalized centred simplex gradients. *IMA Journal of Numerical Analysis*, 42(1):744–770, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/744/6029096>.

Harder:2022:EEC

- [1209] Paula Harder and Balázs Kovács. Error estimates for the Cahn–Hilliard equation with dynamic boundary conditions. *IMA Journal of Numerical Analysis*, 42(3):2589–2620, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2589/6307444>.

Hare:2024:MAA

- [1213] Warren Hare, Gabriel Jarry-Bolduc, and Chayne Planiden. A matrix algebra approach to approximate Hessians. *IMA Journal of Numerical Analysis*, 44(4):2220–2250, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2220/7232487>.

Hardering:2023:TET

- [1210] Hanne Hardering and Simon Praetorius. Tangential errors of tensor surface finite elements. *IMA Journal of Numerical Analysis*, 43(3):1543–1585, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1543/6586271>.

Harrach:2023:RLI

- [1214] Bastian Harrach, Tim Jahn, and Roland Potthast. Regularizing linear inverse problems under unknown non-Gaussian white noise allowing repeated measurements. *IMA Journal of Numerical Analysis*, 43(1):443–500, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/443/6512076>.

Hardering:2022:QCC

- [1211] Hanne Hardering and Benedikt Wirth. Quartic L^p -convergence of cubic Riemannian splines. *IMA Journal of Numerical Analysis*, 42(4):3360–3385, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3360/6412939>.

Haut:2016:HOT

- [1215] T. S. Haut, T. Babb, P. G. Martinsen, and B. A. Wingate. A high-order time-parallel scheme for solving wave propagation problems via the direct construction of an approximate

time-evolution operator. *IMA Journal of Numerical Analysis*, 36(2):688–716, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/688>.

He:2020:OPA

- [1216] Bingsheng He, Feng Ma, and Xiaoming Yuan. Optimal proximal augmented Lagrangian method and its application to full Jacobian splitting for multi-block separable convex minimization problems. *IMA Journal of Numerical Analysis*, 40(2):1188–1216, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1188/5272537>.

He:2015:SMS

- [1217] Bingsheng He, Min Tao, and Xiaoming Yuan. A splitting method for separable convex programming. *IMA Journal of Numerical Analysis*, 35(1):394–426, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/394>.

He:1997:ACN

- [1218] Chunyang He and G. A. Watson. An algorithm for computing the numerical radius. *IMA Journal of Numerical Analysis*, 17(3):329–342, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170329.sgm.abs.html.

He:2003:FDS

- [1219] Journal Yinnian He. A fully discrete stabilized finite-element method for the time-dependent Navier–Stokes problem. *IMA Journal of Numerical Analysis*, 23(4):665–691, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230665.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230665.pdf.

He:2015:UCE

- [1220] Yinnian He. Unconditional convergence of the Euler semi-implicit scheme for the three-dimensional incompressible MHD equations. *IMA Journal of Numerical Analysis*, 35(2):767–801, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/767>.

Heeren:2019:VTD

- [1221] Behrend Heeren, Martin Rumpf, and Benedikt Wirth. Variational time discretization of Riemannian splines. *IMA Journal of Numerical Analysis*, 39(1):61–104, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/61/4808587>.

Hegland:1998:WAP

- [1222] Markus Hegland and Michael R. Osborne. Wrap-around partitioning for block bidiagonal linear systems. *IMA Journal of Numerical Analysis*, 18(3):

- 373–383, July 1998. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180373.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180373.pdf.
- Heine:2006:CFS**
- [1223] Claus-Justus Heine. Computations of form and stability of rotating drops with finite elements. *IMA Journal of Numerical Analysis*, 26(4):723–751, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/723>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/723>.
- Heinrich:2003:NMF**
- [1224] B. Heinrich and S. Nicaise. The Nitsche mortar finite-element method for transmission problems with singularities. *IMA Journal of Numerical Analysis*, 23(2):331–358, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230331.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230331.pdf.
- Heinrich:2006:FFE**
- [1225] Bernd Heinrich and Beate Jung. The Fourier-finite-element method with Nitsche mortaring. *IMA Journal of Numerical Analysis*, 26(3):541–562, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/541>; http://www3.oup.co.uk/imanum/hdb/Volume_26/3/541.
- Hell:2015:MDS**
- [1226] Tobias Hell, Alexander Ostermann, and Michael Sandbichler. Modification of dimension-splitting methods—overcoming the order reduction due to corner singularities. *IMA Journal of Numerical Analysis*, 35(3):1078–1091, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1078>.
- Helou:2023:SOC**
- [1227] Elias S. Helou, Sandra A. Santos, and Lucas E. A. Simões. A sequential optimality condition for Mathematical Programs with equilibrium constraints based on a nonsmooth formulation. *IMA Journal of Numerical Analysis*, 43(3):1586–1615, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1586/6586009>.
- Hemker:2000:USH**
- [1228] P. W. Hemker, G. I. Shishkin, and L. P. Shishkina. ϵ -uniform schemes with high-order time-accuracy for parabolic singular perturbation problems. *IMA Journal of Numerical Analysis*, 20(1):99–121, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200099.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200099.pdf.

Henke:2014:BCS

- [1229] Christian Henke and Lutz Angermann. $L^\infty(L^\infty)$ -boundedness and convergence of DG(p) solutions for nonlinear conservation laws with boundary conditions. *IMA Journal of Numerical Analysis*, 34(4):1598–1624, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1598>. See erratum [1230].

Henke:2015:EPB

- [1230] Christian Henke and Lutz Angermann. Erratum to the paper “ $L^\infty(L^\infty)$ -boundedness and convergence of DG(p)-solutions for nonlinear conservation laws with boundary conditions”. *IMA Journal of Numerical Analysis*, 35(3):1483–1485, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1483>. See [1229].

Herbin:2023:CQS

- [1231] Raphaèle Herbin, Jean-Claude Latché, Youssouf Nasser, and Nicolas Therme. A consistent quasi-second-order staggered scheme for the two-dimensional shallow water equations. *IMA Journal of Numerical Analysis*, 43(1):99–143, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/99/6463328>.

Herbin:2020:CCP

- [1232] Raphaèle Herbin, Jean-Claude Latché, and Chady Zaza. A cell-centred

pressure-correction scheme for the compressible Euler equations. *IMA Journal of Numerical Analysis*, 40(3):1792–1837, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1792/5513045>.

Herbin:2001:FVA

- [1233] Raphaèle Herbin and Emmanuelle Marchand. Finite volume approximation of a class of variational inequalities. *IMA Journal of Numerical Analysis*, 21(2):553–585, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210553.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210553.pdf.

Herbst:1981:CEE

- [1234] B. M. Herbst and J. F. Botha. Computable error estimates for the collocation method applied to two-point boundary value problems. *IMA Journal of Numerical Analysis*, 1(4):489–497, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Hernandez:2009:AVM

- [1235] Erwin Hernández, Enrique Otárola, Rodolfo Rodríguez, and Frank Sanhueza. Approximation of the vibration modes of a Timoshenko curved rod of arbitrary geometry. *IMA Journal of Numerical Analysis*, 29(1):180–207, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Herr:2017:TTI

- [1236] Sebastian Herr and Katharina Schratz. Trigonometric time integrators for the Zakharov system. *IMA Journal of Numerical Analysis*, 37(4):2042–2066, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2042/2670310>.

Herremans:2025:EFA

- [1237] Astrid Herremans and Daan Huybrechs. Efficient function approximation in enriched approximation spaces. *IMA Journal of Numerical Analysis*, 45(2):673–695, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/673/7668415>.

Herty:2024:MAS

- [1238] M. Herty, A. Kolb, and S. Müller. Multiresolution analysis for stochastic hyperbolic conservation laws. *IMA Journal of Numerical Analysis*, 44(1):536–575, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/536/7080301>.

Heuer:2001:ASM

- [1239] Norbert Heuer and Ernst P. Stephan. An additive Schwarz method for the h - p version of the boundary element method for hypersingular integral equations in \mathbb{R} . *IMA Journal of Numerical Analysis*, 21(1):265–283, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210265abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210265.pdf.

http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210265abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210265.pdf.

Hewett:2015:FIB

- [1240] D. P. Hewett, S. Langdon, and S. N. Chandler-Wilde. A frequency-independent boundary element method for scattering by two-dimensional screens and apertures. *IMA Journal of Numerical Analysis*, 35(4):1698–1728, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1698>.

Higham:1989:AEK

- [1241] Desmond J. Higham. Analysis of the Enright–Kamel partitioning method for stiff ordinary differential equations. *IMA Journal of Numerical Analysis*, 9(1):1–14, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Higham:1991:GEV

- [1242] Desmond J. Higham. Global error versus tolerance for explicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 11(4):457–480, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Higham:2005:SRR

- [1243] Desmond J. Higham. Spectral reordering of a range-dependent weighted random graph. *IMA Journal of Numerical Analysis*, 25(3):443–457, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://imanum.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210265abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210265.pdf.

- oxfordjournals.org/cgi/content/abstract/25/3/443; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/443>.
- [1244] Nicholas J. Higham. Fast solution of Vandermonde-like systems involving orthogonal polynomials. *IMA Journal of Numerical Analysis*, 8(4):473–486, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- [1245] Nicholas J. Higham. Iterative refinement for linear systems and LAPACK. *IMA Journal of Numerical Analysis*, 17(4):495–509, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170495.sgm.abs.html. Preprint published as Numerical Analysis Report 277, Manchester Centre for Computational Mathematics, Manchester, England, and as LAPACK Working Note 104.
- [1246] Nicholas J. Higham. Computing the nearest correlation matrix—a problem from finance. *IMA Journal of Numerical Analysis*, 22(3):329–343, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220329.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220329.pdf.
- [1247] Nicholas J. Higham. The numerical stability of barycentric Lagrange interpolation. *IMA Journal of Numerical Analysis*, 24(4):547–556, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/547>; <http://imanum.oupjournals.org/cgi/reprint/24/4/547>.
- [1248] Nicholas J. Higham and Hyun-Min Kim. Numerical analysis of a quadratic matrix equation. *IMA Journal of Numerical Analysis*, 20(4):499–519, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200499abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200499.pdf.
- [1249] Nicholas J. Higham and Theo Mary. Solving block low-rank linear systems by LU factorization is numerically stable. *IMA Journal of Numerical Analysis*, 42(2):951–980, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/951/6238550>.
- [1250] A. T. Hill and E. Süli. Set convergence for discretizations of the attractor. *IMA Journal of Numerical Analysis*, 16(2):289–296, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/1602289.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/pdf/1602289.pdf.

oup.co.uk/imanum/hdb/Volume_16/
Issue_02/160289.sgm.abs.html.

Hill:2005:MAL

- [1251] Adrian T. Hill. Multistep approximation of linear sectorial evolution equations. *IMA Journal of Numerical Analysis*, 25(1):45–56, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/45;> <http://imanum.oupjournals.org/cgi/reprint/25/1/45>.

Hill:2011:EST

- [1252] Adrian T. Hill and Achim Ilchmann. Exponential stability of time-varying linear systems. *IMA Journal of Numerical Analysis*, 31(3):865–885, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/865.full.pdf+html>.

Hill:2000:AGA

- [1253] Adrian T. Hill and Endre Suli. Approximation of the global attractor for the incompressible Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 20(4):633–667, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200633abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200633.pdf.

Hill:1986:NDF

- [1254] M. G. Hill and D. Porter. The numerical determination of fundamental solu-

tions of elliptic equations. *IMA Journal of Numerical Analysis*, 6(4):405–420, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Hipp:2019:UEA

- [1255] David Hipp, Marlis Hochbruck, and Christian Stohrer. Unified error analysis for nonconforming space discretizations of wave-type equations. *IMA Journal of Numerical Analysis*, 39(3):1206–1245, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1206/5055760>.

Hipp:2021:FEE

- [1256] David Hipp and Balázs Kovács. Finite element error analysis of wave equations with dynamic boundary conditions: L^2 estimates. *IMA Journal of Numerical Analysis*, 41(1):638–728, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/638/5818995>.

Hirn:2012:FEA

- [1257] Adrian Hirn, Martin Lanzendörfer, and Jan Stebel. Finite element approximation of flow of fluids with shear-rate- and pressure-dependent viscosity. *IMA Journal of Numerical Analysis*, 32(4):1604–1634, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1604.full.pdf+html>.

Hochbruck:2022:EAS

- [1258] Marlis Hochbruck and Bernhard Maier. Error analysis for space discretizations of quasilinear wave-type equations. *IMA Journal of Numerical Analysis*, 42(3):1963–1990, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/1963/6411793>.

Hochmuth:2001:LBE

- [1259] Reinhard Hochmuth. A localized boundary element method for the floating body problem. *IMA Journal of Numerical Analysis*, 21(4):799–816, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210799.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210799.pdf.

Hocking:2012:CFM

- [1260] L. Robert Hocking and Chen Greif. Closed-form multigrid smoothing factors for lexicographic Gauss-Seidel. *IMA Journal of Numerical Analysis*, 32(3):795–812, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/795.full.pdf+html>.

Hoel:2024:HOA

- [1261] Håkon Hoel and Sankarasubramanian Ragunathan. Higher-order adaptive methods for exit times of Itô diffusions. *IMA Journal of Numerical Analysis*, 44(5):2821–2863, September 2024. CODEN IJNADH. ISSN 0272-4979

(print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2821/7320265>.

Hoffmann:1996:PSV

- [1262] K.-H. Hoffmann and Jun Zou. Parallel solution of variational inequality problems with nonlinear source terms. *IMA Journal of Numerical Analysis*, 16(1):31–45, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160031.sgm.abs.html.

Hofmanova:2020:REI

- [1263] Martina Hofmanová, Marvin Knöller, and Katharina Schratz. Randomized exponential integrators for modulated nonlinear Schrödinger equations. *IMA Journal of Numerical Analysis*, 40(4):2143–2162, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2143/5694616>.

Hofreither:2022:LMS

- [1264] Clemens Hofreither, Ludwig Mitter, and Hendrik Speleers. Local multigrid solvers for adaptive isogeometric analysis in hierarchical spline spaces. *IMA Journal of Numerical Analysis*, 42(3):2429–2458, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2429/6295139>.

Holden:2009:CFD

- [1265] H. Holden, K. H. Karlsen, and N. H. Risebro. A convergent finite-difference method for a nonlinear vari-

- ational wave equation. *IMA Journal of Numerical Analysis*, 29(3):539–572, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/539>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/539>.
- [1266] Helge Holden, Ujjwal Koley, and Nils Henrik Risebro. Convergence of a fully discrete finite difference scheme for the Korteweg–de Vries equation. *IMA Journal of Numerical Analysis*, 35(3):1047–1077, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1047>.
- [1267] Jialin Hong, Chuying Huang, and Xu Wang. Optimal rate of convergence for two classes of schemes to stochastic differential equations driven by fractional Brownian motions. *IMA Journal of Numerical Analysis*, 41(2):1608–1638, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1608/5874556>.
- [1268] Jialin Hong, Derui Sheng, and Tau Zhou. A splitting semi-implicit Euler method for stochastic incompressible Euler equations on T^2 . *IMA Journal of Numerical Analysis*, 43(5):2748–2776, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2748/6759611>.
- [1269] H. H. Hopkins. Numerical evaluation of a class of double integrals of oscillatory functions. *IMA Journal of Numerical Analysis*, 9(1):61–80, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- [1270] Ronald H. W. Hoppe. A globally convergent multi-grid algorithm for moving boundary problems of two-phase Stefan type. *IMA Journal of Numerical Analysis*, 13(2):235–253, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- [1271] M. E. Hosea and L. F. Shampine. Global extrapolation integrators for solving Sturm–Liouville problems by shooting. *IMA Journal of Numerical Analysis*, 13(3):397–411, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- [1272] Radim Hosek and Bangwei She. Convergent numerical method for the Navier–Stokes–Fourier system: a stabilized scheme. *IMA Journal of Numerical Analysis*, 39(4):2045–2068, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/2045/5075403>.

Hopkins:1989:NEC

Holden:2015:CFD

Hoppe:1993:GCM

Hong:2021:ORC

Hosea:1993:GEI

Hong:2023:SSI

Hosek:2019:CNM

Houbak:1985:DRT

- [1273] Niels Houbak, Syvert P. Nørsett, and Per Grove Thomsen. Displacement or residual test in the application of implicit methods for stiff problems. *IMA Journal of Numerical Analysis*, 5(3):297–305, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Hough:1981:EFC

- [1274] D. M. Hough. Exact formulae for certain integrals arising in potential theory. *IMA Journal of Numerical Analysis*, 1(2):223–228, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Houston:2007:PEI

- [1275] Paul Houston, Ilaria Perugia, and Dominik Schötzau. An a posteriori error indicator for discontinuous Galerkin discretizations of H (curl)-elliptic partial differential equations. *IMA Journal of Numerical Analysis*, 27(1):122–150, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/122>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/122>.

Houston:2005:DGF

- [1276] Paul Houston, Janice Robson, and Endre Süli. Discontinuous Galerkin finite element approximation of quasi-linear elliptic boundary value problems. I: the scalar case. *IMA Journal of Numerical Analysis*, 25(4):726–749, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/726>.

Houston:2008:PEA

- [1277] Paul Houston, Endre Süli, and Thomas P. Wihler. A posteriori error analysis of hp version discontinuous Galerkin finite-element methods for second-order quasi-linear elliptic PDEs. *IMA Journal of Numerical Analysis*, 28(2):245–273, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/245>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/245>.

Houston:2012:SOE

- [1278] Paul Houston and Thomas P. Wihler. Second-order elliptic PDEs with discontinuous boundary data. *IMA Journal of Numerical Analysis*, 32(1):48–74, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/48.full.pdf+html>.

Hovhannisyan:2010:SFA

- [1279] Nune Hovhannisyan and Siegfried Müller. On the stability of fully adaptive multiscale schemes for conservation laws using approximate flux and source reconstruction strategies. *IMA Journal of Numerical Analysis*, 30(4):1256–1295, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1256.full.pdf+html>.

Hrycak:2020:ELP

- [1280] Tomasz Hrycak and Sebastian Schmutzhard. Evaluation of Legendre polynomials by a three-term recurrence in floating-point arithmetic. *IMA Journal of Numerical Analysis*, 40(1):587–605, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/587/5162990>.

Hsiao:2017:BCB

- [1281] George C. Hsiao, Tonatiuh Sánchez-Vizuet, and Francisco-Javier Sayas. Boundary and coupled boundary-finite element methods for transient wave-structure interaction. *IMA Journal of Numerical Analysis*, 37(1):237–265, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/237/2669945/Boundary-and-coupled-boundary-finite-element>.

Hsiao:2019:TDW

- [1282] George C. Hsiao, Tonatiuh Sánchez-Vizuet, Francisco-Javier Sayas, and Richard J. Weinacht. A time-dependent wave-thermoelastic solid interaction. *IMA Journal of Numerical Analysis*, 39(2):924–956, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/924/4964961>.

Hu:1999:SRK

- [1283] Guang-Da Hu, Guang-Di Hu, and S. A. Meguid. Stability of Runge–Kutta methods for delay differential systems with multiple delays. *IMA*

Journal of Numerical Analysis, 19(3):349–356, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190349.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190349.pdf.

Hu:2023:PPE

- [1284] Jingwei Hu and Xiangxiong Zhang. Positivity-preserving and energy-dissipative finite difference schemes for the Fokker–Planck and Keller–Segel equations. *IMA Journal of Numerical Analysis*, 43(3):1450–1484, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1450/6585764>.

Hu:2019:TLO

- [1285] Jun Hu and Mira Schedensack. Two low-order nonconforming finite element methods for the Stokes flow in three dimensions. *IMA Journal of Numerical Analysis*, 39(3):1447–1470, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1447/4975386>.

Hu:2023:SSH

- [1286] Kaibo Hu, Qian Zhang, Jiayu Han, Lixiu Wang, and Zhimin Zhang. Spurious solutions for high-order curl problems. *IMA Journal of Numerical Analysis*, 43(3):1422–1449, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1422/6618076>.

Hu:1998:GMT

- [1287] Qiya Hu. Geometric meshes and their application to Volterra integro-differential equations with singularities. *IMA Journal of Numerical Analysis*, 18(1):151–164, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180151.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180151.pdf.

Hu:2004:PPS

- [1288] Qiya Hu. Preconditioning Poincaré–Steklov operators arising from domain decompositions with mortar multipliers. *IMA Journal of Numerical Analysis*, 24(4):643–669, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/643>; <http://imanum.oupjournals.org/cgi/reprint/24/4/643>.

Hu:2024:CDA

- [1289] Xiaoyin Hu, Nachuan Xiao, Xin Liu, and Kim-Chuan Toh. A constraint dissolving approach for nonsmooth optimization over the Stiefel manifold. *IMA Journal of Numerical Analysis*, 44(6):3717–3748, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/44/6/3717/7490879>.

Hu:1993:ADR

- [1290] Yinggang Hu. An algorithm for data reduction using splines with free knots. *IMA Journal of Numerical Analysis*,

13(3):365–381, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Huang:1981:CAO

- [1291] C. P. Huang. On the convergence of the QR algorithm with origin shifts for normal matrices. *IMA Journal of Numerical Analysis*, 1(1):127–133, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Huang:2010:CFF

- [1292] C.-S. Huang, C.-H. Hung, and Song Wang. On convergence of a fitted finite-volume method for the valuation of options on assets with stochastic volatilities. *IMA Journal of Numerical Analysis*, 30(4):1101–1120, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1101.full.pdf+html>.

Huang:2020:NAN

- [1293] Can Huang, Kim Ngan Le, and Martin Stynes. A new analysis of a numerical method for the time-fractional Fokker–Planck equation with general forcing. *IMA Journal of Numerical Analysis*, 40(2):1217–1240, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/40/2/1217/5316762>.

Huang:2017:SGM

- [1294] Can Huang and Martin Stynes. Spectral Galerkin methods for a weakly singular Volterra integral equation of the second kind. *IMA Journal*

- of *Numerical Analysis*, 37(3):1411–1436, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1411/2670015/Spectral-Galerkin-methods-for-a-weakly-singular>.
- [1295] Chengming Huang. Dissipativity of Runge–Kutta methods for dynamical systems with delays. *IMA Journal of Numerical Analysis*, 20(1):153–166, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200153.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200153.pdf.
- [1296] Chengming Huang. Stability analysis of general linear methods for the nonautonomous pantograph equation. *IMA Journal of Numerical Analysis*, 29(2):444–465, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/444>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/444>.
- [1297] Huaxiong Huang and Zhilin Li. Convergence analysis of the immersed interface method. *IMA Journal of Numerical Analysis*, 19(4):583–608, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190583.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190583.pdf.
- [1298] Jianguo Huang and Jun Zou. A mortar element method for elliptic problems with discontinuous coefficients. *IMA Journal of Numerical Analysis*, 22(4):549–576, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220549.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220549.pdf.
- [1299] Weizhang Huang and David M. Sloan. A new pseudospectral method with upwind features. *IMA Journal of Numerical Analysis*, 13(3):413–430, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- [1300] Y. Huang and P. A. Forsyth. Analysis of a penalty method for pricing a guaranteed minimum withdrawal benefit (GMWB). *IMA Journal of Numerical Analysis*, 32(1):320–351, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/320.full.pdf+html>.
- [1301] Zheng-Hai Huang. The global linear and local quadratic convergence of a non-interior continuation algorithm for the LCP. *IMA Journal*

Huang:2000:DRK

Huang:2002:MEM

Huang:1993:NPM

Huang:2009:SAG

Huang:2012:APM

Huang:1999:CAI

Huang:2005:GLL

of *Numerical Analysis*, 25(4):670–684, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/670>.

Huhtanen:2010:RAU

- [1302] Marko Huhtanen. Rational approximation of the unitary exponential. *IMA Journal of Numerical Analysis*, 30(2):512–524, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/512>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/512>.

Humphries:1993:SSN

- [1303] A. R. Humphries. Spurious solutions of numerical methods for initial value problems. *IMA Journal of Numerical Analysis*, 13(2):263–290, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Hundsdoerfer:1994:EGL

- [1304] Willem Hundsdoerfer. On the error of general linear methods for stiff dissipative differential equations. *IMA Journal of Numerical Analysis*, 14(3):363–379, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Hundsdoerfer:2004:NFL

- [1305] Willem Hundsdoerfer and Carolynne Montijn. A note on flux limiting for diffusion discretizations. *IMA Journal of Numerical Analysis*, 24(4):635–642, October 2004.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/635>; <http://imanum.oupjournals.org/cgi/reprint/24/4/635>.

Huning:2022:CAS

- [1306] Svenja Hüning and Johannes Wallner. Convergence analysis of subdivision processes on the sphere. *IMA Journal of Numerical Analysis*, 42(1):698–711, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/698/6044444>.

Huybrechs:2011:HORa

- [1307] Daan Huybrechs, Arieh Iserles, and Syvert P. Nørsett. From high oscillation to rapid approximation IV: accelerating convergence. *IMA Journal of Numerical Analysis*, 31(2):442–468, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/442.full.pdf+html>.

Huybrechs:2011:HORb

- [1308] Daan Huybrechs, Arieh Iserles, and Syvert P. Nørsett. From high oscillation to rapid approximation V: the equilateral triangle. *IMA Journal of Numerical Analysis*, 31(3):755–785, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/755.full.pdf+html>.

Huybrechs:2018:CIA

- [1309] Daan Huybrechs and Peter Opsomer. Construction and implementation of asymptotic expansions for Laguerre-type orthogonal polynomials. *IMA Journal of Numerical Analysis*, 38(3):1085–1118, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1085/4056070>.

Hyvonen:1998:PAP

- [1310] Saara Hyvönen. Polynomial acceleration of the Picard–Lindelöf iteration. *IMA Journal of Numerical Analysis*, 18(4):519–543, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180519.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180519.pdf.

Iannazzo:2018:RBB

- [1311] Bruno Iannazzo and Margherita Porcelli. The Riemannian Barzilai–Borwein method with nonmonotone line search and the matrix geometric mean computation. *IMA Journal of Numerical Analysis*, 38(1):495–517, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/495/3573895>.

Ibdah:2020:FDN

- [1312] Hussain A. Ibdah, Cecilia F. Mondaini, and Edriss S. Titi. Fully discrete numerical schemes of a data

assimilation algorithm: uniform-in-time error estimates. *IMA Journal of Numerical Analysis*, 40(4):2584–2625, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2584/5618687>.

Igbida:2018:ALM

- [1313] Nouredine Igbida and Van Thanh Nguyen. Augmented Lagrangian method for optimal partial transportation. *IMA Journal of Numerical Analysis*, 38(1):156–183, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/156/3061343>.

Iguchi:2021:SOD

- [1314] Yuga Iguchi and Toshihiro Yamada. A second-order discretization for degenerate systems of stochastic differential equations. *IMA Journal of Numerical Analysis*, 41(4):2782–2829, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2782/5880430>.

Ilic:2010:RLA

- [1315] M. Ilić, I. W. Turner, and D. P. Simpson. A restarted Lanczos approximation to functions of a symmetric matrix. *IMA Journal of Numerical Analysis*, 30(4):1044–1061, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1044.full.pdf+html>.

Iliev:2002:SOA

- [1316] Oleg P. Iliev. On second-order-accurate discretization of 3D interface problems and its fast solution with a pointwise multigrid solver. *IMA Journal of Numerical Analysis*, 22(3):391–406, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220391.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220391.pdf.

Imbert-Gerard:2014:GPW

- [1317] Lise-Marie Imbert-Gérard and Bruno Després. A generalized plane-wave numerical method for smooth non-constant coefficients. *IMA Journal of Numerical Analysis*, 34(3):1072–1103, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1072>.

intHout:1997:SAR

- [1318] K. J. in 't Hout. Stability analysis of Runge–Kutta methods for systems of delay differential equations. *IMA Journal of Numerical Analysis*, 17(1):17–27, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170017.sgm.abs.html.

intHout:2014:SCA

- [1319] K. J. in 't Hout and K. Volders. Stability and convergence analysis of discretizations of the Black–Scholes PDE with the linear boundary condition. *IMA Journal of*

Numerical Analysis, 34(1):296–325, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/296.full.pdf+html>.

Ingham:1981:BIE

- [1320] D. B. Ingham, P. J. Heggs, and M. Manzoor. Boundary integral equation solution of nonlinear plane potential problems. *IMA Journal of Numerical Analysis*, 1(4):415–426, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Iserles:1986:GLM

- [1321] A. Iserles. Generalized leapfrog methods. *IMA Journal of Numerical Analysis*, 6(4):381–392, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Iserles:1986:MDL

- [1322] A. Iserles. Multistep discretization of linear hyperbolic equations. *IMA Journal of Numerical Analysis*, 6(3):293–307, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Iserles:1990:SDN

- [1323] A. Iserles. Stability and dynamics of numerical methods for nonlinear ordinary differential equations. *IMA Journal of Numerical Analysis*, 10(1):1–30, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Iserles:1991:CDC

- [1324] A. Iserles. Complex dynamics of convergence acceleration. *IMA Journal*

of *Numerical Analysis*, 11(2):205–240, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Iserles:1990:TPR

- [1325] A. Iserles and S. P. Nørsett. On the theory of parallel Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 10(4):463–488, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Iserles:1981:ARA

- [1326] A. Iserles and M. J. D. Powell. On the A -acceptability of rational approximations that interpolate the exponential function. *IMA Journal of Numerical Analysis*, 1(3):241–251, July 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Iserles:1992:ZHD

- [1327] A. Iserles, E. B. Saff, and Xiao Yan Liu. On zeros of Hankel determinants with iterated polynomial entries. *IMA Journal of Numerical Analysis*, 12(3):387–403, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

Iserles:1992:UAS

- [1328] A. Iserles and A. M. Stuart. Unified approach to spurious solutions introduced by time discretization. II. BDF-like methods. *IMA Journal of Numerical Analysis*, 12(4):487–502, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Iserles:1984:SAS

- [1329] A. Iserles and R. A. Williamson. Stability and accuracy of semidiscretized finite difference methods. *IMA Journal of Numerical Analysis*, 4(3):289–307, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Iserles:1982:OSS

- [1330] Arieh Iserles. Order stars and a saturation theorem for first-order hyperbolics. *IMA Journal of Numerical Analysis*, 2(1):49–61, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Iserles:2001:MMM

- [1331] Arieh Iserles. Multistep methods on manifolds. *IMA Journal of Numerical Analysis*, 21(1):407–419, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210407.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210407.pdf.

Iserles:2004:NQH

- [1332] Arieh Iserles. On the numerical quadrature of highly-oscillating integrals. I: Fourier transforms. *IMA Journal of Numerical Analysis*, 24(3):365–391, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240365.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240365.pdf.

Iserles:2005:NQH

- [1333] Arieh Iserles. On the numerical quadrature of highly-oscillating integrals II: Irregular oscillators. *IMA Journal of Numerical Analysis*, 25(1):25–44, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/25>; <http://imanum.oupjournals.org/cgi/reprint/25/1/25>.

Iserles:2014:SSD

- [1334] Arieh Iserles. On skew-symmetric differentiation matrices. *IMA Journal of Numerical Analysis*, 34(2):435–451, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/435.full.pdf+html>.

Iserles:2008:HOR

- [1335] Arieh Iserles and Syvert P. Nørsett. From high oscillation to rapid approximation I: Modified Fourier expansions. *IMA Journal of Numerical Analysis*, 28(4):862–887, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/862>.

Iserles:2009:HOR

- [1336] Arieh Iserles and Syvert P. Nørsett. From high oscillation to rapid approximation III: multivariate expansions. *IMA Journal of Numerical Analysis*, 29(4):882–916, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/>

[abstract/29/4/882](http://imajna.oxfordjournals.org/cgi/reprint/29/4/882); <http://imajna.oxfordjournals.org/cgi/reprint/29/4/882>.

Iserles:2008:D

- [1337] Arieh Iserles and Michael L. Overton. Dedication. *IMA Journal of Numerical Analysis*, 28(4):647–648, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/reprint/28/4/647>.

Iserles:2007:CE

- [1338] Arieh Iserles, Michael L. Overton, and Endre Süli. Change of Editorship. *IMA Journal of Numerical Analysis*, 27(1):i, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/reprint/27/1/i>.

Jackiewicz:1987:SAM

- [1339] Z. Jackiewicz. Stability analysis of modified multilag methods for Volterra integral equations. *IMA Journal of Numerical Analysis*, 7(4):473–484, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Jackson:1989:OCS

- [1340] I. R. H. Jackson. An order of convergence for some radial basis functions. *IMA Journal of Numerical Analysis*, 9(4):567–587, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Jacobs:1986:GCG

- [1341] D. A. H. Jacobs. A generalization of the conjugate-gradient method to solve

complex systems. *IMA Journal of Numerical Analysis*, 6(4):447–452, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Jahnke:2019:AEM

- [1342] T. Jahnke and M. Mikl. Adiabatic exponential midpoint rule for the dispersion-managed nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 39(4):1818–1859, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1818/5053833>.

Jain:1984:SOS

- [1343] R. K. Jain, N. S. Kambo, and Rakesh Goel. A sixth-order P -stable symmetric multistep method for periodic initial value problems of second-order differential equations. *IMA Journal of Numerical Analysis*, 4(1):117–125, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Jankuhn:2021:TFE

- [1344] Thomas Jankuhn and Arnold Reusken. Trace finite element methods for surface vector-Laplace equations. *IMA Journal of Numerical Analysis*, 41(1):48–83, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/48/5829029>.

Janovsky:1995:NAS

- [1345] Vladimír Janovský and Petr Plecháč. Numerical analysis of subspace-breaking Takens–Bogdanov points.

IMA Journal of Numerical Analysis, 15(2):265–290, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Janovsky:1995:CAT

- [1346] Vladimír Janovský and Bodo Werner. Constructive analysis of Takens–Bogdanov points with Z_2 -symmetry. *IMA Journal of Numerical Analysis*, 15(1):1–21, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Jantsch:2019:LCW

- [1347] Peter Jantsch, Clayton G. Webster, and Guannan Zhang. On the Lebesgue constant of weighted Leja points for Lagrange interpolation on unbounded domains. *IMA Journal of Numerical Analysis*, 39(2):1039–1057, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/1039/4944440>.

Jarozzkowski:2024:FEA

- [1348] Bartosz Jarozzkowski and Max Jensen. Finite element approximation of Hamilton–Jacobi–Bellman equations with nonlinear mixed boundary conditions. *IMA Journal of Numerical Analysis*, 44(1):576–603, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/576/7074506>.

Jawecki:2024:USB

- [1349] Tobias Jawecki and Pranav Singh. Unitarity of some barycentric rational approximants. *IMA Journal of Numerical Analysis*, 44(4):2070–2089, July 2024.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2070/7246874>.

Jbilou:1999:IMM

- [1350] K. Jbilou and H. Sadok. *LU* implementation of the modified minimal polynomial extrapolation method for solving linear and nonlinear systems. *IMA Journal of Numerical Analysis*, 19(4): 549–561, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190549.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190549.pdf.

Jeknic:2024:TDB

- [1351] Zorica Milovanović Jeknić, Aleksandra Delić, and Sandra Živanović. A two-dimensional boundary value problem of elliptic type with nonlocal conjugation conditions. *IMA Journal of Numerical Analysis*, 44(5):3094–3123, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/3094/7407729>.

Jeltsch:1998:ABS

- [1352] R. Jeltsch, R. A. Renaut, and J. H. Smit. An accuracy barrier for stable three-time-level difference schemes for hyperbolic equations. *IMA Journal of Numerical Analysis*, 18(3): 445–484, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180445.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180445.pdf.

[//www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180445.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180445.pdf).

Jennings:1982:BSV

- [1353] A. Jennings. Bounds for the singular values of a matrix. *IMA Journal of Numerical Analysis*, 2(4):459–474, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Jenschke:2019:AMS

- [1354] Tristan Jenschke. Approximation of minimal surfaces with free boundaries: convergence results. *IMA Journal of Numerical Analysis*, 39(3):1391–1420, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1391/5053816>.

Jensen:2017:FEC

- [1355] Max Jensen. $L^2(H_\gamma^1)$ finite element convergence for degenerate isotropic Hamilton–Jacobi–Bellman equations. *IMA Journal of Numerical Analysis*, 37(3):1300–1316, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1300/2422322/L2-H-1-Finite-Element-Convergence-for-Degenerate>.

Jensen:2022:FEC

- [1356] Max Jensen, Axel Målqvist, and Anna Persson. Finite element convergence for the time-dependent Joule heating problem with mixed boundary conditions. *IMA Journal of Numerical Analysis*, 42(1):199–228, January 2022. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/199/5917124>.

Jentzen:2021:SEA

- [1357] Arnulf Jentzen, Benno Kuckuck, Ariel Neufeld, and Philippe von Wurstemberger. Strong error analysis for stochastic gradient descent optimization algorithms. *IMA Journal of Numerical Analysis*, 41(1):455–492, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/455/5828290>.

Jentzen:2020:SCR

- [1358] Arnulf Jentzen and Primoz Pusnik. Strong convergence rates for an explicit numerical approximation method for stochastic evolution equations with non-globally Lipschitz continuous nonlinearities. *IMA Journal of Numerical Analysis*, 40(2):1005–1050, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1005/5444218>.

Jepson:1984:IOD

- [1359] A. Jepson and A. Spence. On implicit ordinary differential equations. *IMA Journal of Numerical Analysis*, 4(3):253–274, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Jerez-Hanckes:2022:SGM

- [1360] Carlos Jerez-Hanckes and José Pinto. Spectral Galerkin method for solving Helmholtz boundary integral equations on smooth screens. *IMA Jour-*

nal of Numerical Analysis, 42(4):3571–3608, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3571/6424455>.

Jerez-Hanckes:2017:EWS

- [1361] Carlos Jerez-Hanckes and Christoph Schwab. Electromagnetic wave scattering by random surfaces: uncertainty quantification via sparse tensor boundary elements. *IMA Journal of Numerical Analysis*, 37(3):1175–1210, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1175/2670002/Electromagnetic-wave-scattering-by-random-surfaces>.

Jiang:2022:AEF

- [1362] Xue Jiang, Peijun Li, Junliang Lv, Zhoufeng Wang, Haijun Wu, and Weiyang Zheng. An adaptive edge finite element DtN method for Maxwell’s equations in biperiodic structures. *IMA Journal of Numerical Analysis*, 42(3):2794–2828, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2794/6318666>.

Jiang:2016:CIE

- [1363] Zixian Jiang and Armin Lechleiter. Computing interior eigenvalues of domains from far fields. *IMA Journal of Numerical Analysis*, 36(3):1452–1476, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1452>.

Jimack:1992:SLT

- [1364] P. K. Jimack. On steady and large time solutions of the semi-discrete moving finite element equations for one-dimensional diffusion problems. *IMA Journal of Numerical Analysis*, 12(4): 545–564, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Jimack:1996:OEA

- [1365] P. K. Jimack. Optimal eigenvalue and asymptotic large-time approximations using the moving finite-element method. *IMA Journal of Numerical Analysis*, 16(3):381–398, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160381.sgm.abs.html.

Jin:2015:EAS

- [1366] Bangti Jin, Raytcho Lazarov, Joseph Pasciak, and Zhi Zhou. Error analysis of semidiscrete finite element methods for inhomogeneous time-fractional diffusion. *IMA Journal of Numerical Analysis*, 35(2):561–582, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/561>.

Jin:2016:ASS

- [1367] Bangti Jin, Raytcho Lazarov, and Zhi Zhou. An analysis of the L_1 scheme for the subdiffusion equation with nonsmooth data. *IMA Journal of Numerical Analysis*, 36(1):197–221, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/36/1/197>.

Jin:2018:ACN

- [1368] Bangti Jin, Buyang Li, and Zhi Zhou. An analysis of the Crank–Nicolson method for subdiffusion. *IMA Journal of Numerical Analysis*, 38(1):518–541, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/518/3782812>.

Jin:2020:PTE

- [1369] Bangti Jin, Buyang Li, and Zhi Zhou. Pointwise-in-time error estimates for an optimal control problem with subdiffusion constraint. *IMA Journal of Numerical Analysis*, 40(1):377–404, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/377/5133698>.

Jin:2017:CAF

- [1370] Bangti Jin, Yifeng Xu, and Jun Zou. A convergent adaptive finite element method for electrical impedance tomography. *IMA Journal of Numerical Analysis*, 37(3):1520–1550, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1520/2670046/A-convergent-adaptive-finite-element-method-for>.

Jin:2012:IPC

- [1371] Bangti Jin, Yubo Zhao, and Jun Zou. Iterative parameter choice by dis-

crepancy principle. *IMA Journal of Numerical Analysis*, 32(4):1714–1732, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1714.full.pdf+html>.

Jin:2023:RST

- [1372] Bangti Jin and Zhi Zhou. Recovery of a space-time-dependent diffusion coefficient in subdiffusion: stability, approximation and error analysis. *IMA Journal of Numerical Analysis*, 43(4):2496–2531, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2496/6712213>.

Jin:2010:NER

- [1373] Bangti Jin and Jun Zou. Numerical estimation of the Robin coefficient in a stationary diffusion equation. *IMA Journal of Numerical Analysis*, 30(3):677–701, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/677>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/677>.

Jodar:1998:RMA

- [1374] Lucas Jódar and J. C. Cortés López. Rational matrix approximation with a priori error bounds for non-symmetric matrix Riccati equations with analytic coefficients. *IMA Journal of Numerical Analysis*, 18(4):545–561, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180545.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180545.pdf.

Jodar:1995:NAR

- [1375] Lucas Jódar and Enrique Ponsoda. Non-autonomous Riccati-type matrix differential equations: existence interval, construction of continuous numerical solutions and error bounds. *IMA Journal of Numerical Analysis*, 15(1):61–74, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Joe:1987:DGM

- [1376] S. Joe. Discrete Galerkin methods for Fredholm integral equations of the second kind. *IMA Journal of Numerical Analysis*, 7(2):149–164, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

John:2017:ECF

- [1377] Lorenz John, Petra Pustejovska, Barbara Wohlmuth, and Ulrich Rüde. Energy-corrected finite element methods for the Stokes system. *IMA Journal of Numerical Analysis*, 37(2):687–729, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/687/2669941/Energy-corrected-finite-element-methods-for-the>.

Johnny:2012:FNE

- [1378] Guzmán Johnny and Neilan Michael. A family of nonconforming elements for the Brinkman problem. *IMA Journal of Numerical Analysis*, 32(4):1484–1508, October 2012. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1484.full.pdf+html>.

Johnson:2000:OBE

- [1379] Michael J. Johnson. Overcoming the boundary effects in surface spline interpolation. *IMA Journal of Numerical Analysis*, 20(3):405–422, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200405.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200405.pdf.

Johnson:2009:SCM

- [1380] Michael J. Johnson. A symmetric collocation method with fast evaluation. *IMA Journal of Numerical Analysis*, 29(3):773–789, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/773>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/773>.

Jolly:2005:CNS

- [1381] M. S. Jolly and R. Rosa. Computation of non-smooth local centre manifolds. *IMA Journal of Numerical Analysis*, 25(4):698–725, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/698>.

Jones:2023:ECD

- [1382] Giselle Sosa Jones, Loïc Capan-

era, and Beatrice Riviere. Existence and convergence of a discontinuous Galerkin method for the incompressible three-phase flow problem in porous media. *IMA Journal of Numerical Analysis*, 43(5):2714–2747, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2714/6706611>.

Jovanovic:1987:CFDb

- [1383] Boško S. Jovanović, Lav D. Ivanović, and Endre E. Süli. Convergence of a finite-difference scheme for second-order hyperbolic equations with variable coefficients. *IMA Journal of Numerical Analysis*, 7(1):39–45, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Jovanovic:1987:CFDa

- [1384] Boško S. Jovanović, Lav D. Ivanović, and Endre E. Süli. Convergence of finite-difference schemes for elliptic equations with variable coefficients. *IMA Journal of Numerical Analysis*, 7(3):301–305, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Jovanovic:2011:NSP

- [1385] Boško S. Jovanović and Lubin G. Vulkov. Numerical solution of a parabolic transmission problem. *IMA Journal of Numerical Analysis*, 31(1):233–253, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/233.full.pdf+html>.

Ju:2002:GST

- [1386] Ning Ju. On the global stability of a temporal discretization scheme for the Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 22(4): 577–597, October 2002. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220577.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220577.pdf.

Jung:2023:LTB

- [1387] Jonathan Jung and Vincent Perrier. Long time behavior of finite volume discretization of symmetrizable linear hyperbolic systems. *IMA Journal of Numerical Analysis*, 43(1):326–356, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/326/6479811>.

Jungel:2023:DBE

- [1388] Ansgar Jüngel and Antoine Zurek. A discrete boundedness-by-entropy method for finite-volume approximations of cross-diffusion systems. *IMA Journal of Numerical Analysis*, 43(1):560–589, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/560/6501123>.

Kacur:1999:SSN

- [1389] J. Kačur. Solution to strongly nonlinear parabolic problems by a linear approximation scheme. *IMA Journal of Numerical Analysis*, 19(1):119–145, January 1999. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190119.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190119.pdf.

Kacur:1997:NSC

- [1390] J. Kačur and R. Van Keer. On the numerical solution of a class of nonlinear parabolic problems with Volterra operators by a Rothe-Galerkin finite element method. *IMA Journal of Numerical Analysis*, 17(2): 239–269, April 1997. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170239.sgm.abs.html.

Kadalbajoo:2014:RNB

- [1391] Mohan K. Kadalbajoo, Lok Pati Tripathi, and Puneet Arora. A robust nonuniform B-spline collocation method for solving the generalized Black–Scholes equation. *IMA Journal of Numerical Analysis*, 34(1):252–278, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/252.full.pdf+html>.

Kaklis:1997:SPI

- [1392] P. D. Kaklis and M. I. Karavelas. Shape-preserving interpolation in \mathbf{R}^3 . *IMA Journal of Numerical Analysis*, 17(3):373–419, July 1997. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170373.sgm.abs.html.

Kaklis:1990:CPP

- [1393] P. D. Kaklis and D. G. Pan-
delis. Convexity-preserving polynomial
splines of nonuniform degree. *IMA
Journal of Numerical Analysis*, 10(2):
223–234, 1990. CODEN IJNADH.
ISSN 0272-4979 (print), 1464-3642
(electronic).

Kaltenbacher:2024:CGC

- [1394] Barbara Kaltenbacher. Convergence
guarantees for coefficient reconstruc-
tion in PDEs from boundary mea-
surements by variational and Newton-
type methods via range invariance.
IMA Journal of Numerical Analysis,
44(3):1269–1312, May 2024. CODEN
IJNADH. ISSN 0272-4979 (print),
1464-3642 (electronic). URL [http://
academic.oup.com/imajna/article/
44/3/1269/7225099](http://academic.oup.com/imajna/article/44/3/1269/7225099).

Kaltenbacher:2015:ETI

- [1395] Barbara Kaltenbacher, Vanja Nikolic,
and Mechthild Thalhammer. Efficient
time integration methods based on
operator splitting and application to
the Westervelt equation. *IMA Jour-
nal of Numerical Analysis*, 35(3):1092–
1124, July 2015. CODEN IJNADH.
ISSN 0272-4979 (print), 1464-3642
(electronic). URL [http://imajna.
oxfordjournals.org/content/35/3/
1092](http://imajna.oxfordjournals.org/content/35/3/1092).

Kammonen:2023:SGE

- [1396] Aku Kammonen, Jonas Kiessling,
Petr Plecháč, Mattias Sandberg, An-
ders Szepessy, and Raul Tempone.
Smaller generalization error derived for
a deep residual neural network com-
pared with shallow networks. *IMA
Journal of Numerical Analysis*, 43(5):

2585–2632, September 2023. CODEN
IJNADH. ISSN 0272-4979 (print),
1464-3642 (electronic). URL [http://
academic.oup.com/imajna/article/
43/5/2585/6695119](http://academic.oup.com/imajna/article/43/5/2585/6695119).

Kang:2022:GFE

- [1397] Wenyan Kang, Bernard A. Egwu, Yu-
bin Yan, and Amiya K. Pani. Galerkin
finite element approximation of a
stochastic semilinear fractional subdif-
fusion with fractionally integrated ad-
ditive noise. *IMA Journal of Numerical
Analysis*, 42(3):2301–2335, July 2022.
CODEN IJNADH. ISSN 0272-4979
(print), 1464-3642 (electronic). URL
[http://academic.oup.com/imajna/
article/42/3/2301/6278467](http://academic.oup.com/imajna/article/42/3/2301/6278467).

Kangal:2020:ENA

- [1398] Fatih Kangal and Emre Mengi. Er-
ratum to: Nonsmooth algorithms for
minimizing the largest eigenvalue with
applications to inner numerical radius.
IMA Journal of Numerical Analysis,
40(4):2942, October 2020. CODEN
IJNADH. ISSN 0272-4979 (print),
1464-3642 (electronic). URL [http://
academic.oup.com/imajna/article/
40/4/2942/5753772](http://academic.oup.com/imajna/article/40/4/2942/5753772). See [1399].

Kangal:2020:NAM

- [1399] Fatih Kangal and Emre Mengi. Nons-
smooth algorithms for minimizing the
largest eigenvalue with applications
to inner numerical radius. *IMA
Journal of Numerical Analysis*, 40(4):
2342–2376, October 2020. CODEN
IJNADH. ISSN 0272-4979 (print),
1464-3642 (electronic). URL [http://
academic.oup.com/imajna/article/
40/4/2342/5614862](http://academic.oup.com/imajna/article/40/4/2342/5614862). See erratum
[1398].

Kaps:1989:RMU

- [1400] Peter Kaps and Alexander Ostermann. Rosenbrock methods using few LU -decompositions. *IMA Journal of Numerical Analysis*, 9(1):15–27, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Karaa:2017:FVE

- [1401] Samir Karaa, Kassem Mustapha, and Amiya K. Pani. Finite volume element method for two-dimensional fractional subdiffusion problems. *IMA Journal of Numerical Analysis*, 37(2):945–964, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/945/2669948/Finite-volume-element-method-for-two-dimensional>.■

Karageorghis:1989:MFS

- [1402] A. Karageorghis and G. Fairweather. The method of fundamental solutions for the solution of nonlinear plane potential problems. *IMA Journal of Numerical Analysis*, 9(2):231–242, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Karageorghis:1991:CCS

- [1403] Andreas Karageorghis and Timothy N. Phillips. Conforming Chebyshev spectral collocation methods for the solution of laminar flow in a constricted channel. *IMA Journal of Numerical Analysis*, 11(1):33–54, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Karakashian:2017:TLA

- [1404] Ohannes Karakashian and Craig Collins. Two-level additive Schwarz

methods for discontinuous Galerkin approximations of second-order elliptic problems. *IMA Journal of Numerical Analysis*, 37(4):1800–1830, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1800/2739359>.

Karakatsani:2012:PEE

- [1405] Fotini Karakatsani. A posteriori error estimates for the fractional-step ϑ -scheme for linear parabolic equations. *IMA Journal of Numerical Analysis*, 32(1):141–162, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/141.full.pdf+html>.

Karakatsani:2016:PEE

- [1406] Fotini Karakatsani. A posteriori error estimates for fully discrete fractional-step θ -approximations for parabolic equations. *IMA Journal of Numerical Analysis*, 36(3):1334–1361, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1334>.

Karakatsani:2007:PEA

- [1407] Fotini Karakatsani and Charalambos Makridakis. A posteriori estimates for approximations of time-dependent Stokes equations. *IMA Journal of Numerical Analysis*, 27(4):741–764, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/>

abstract/27/4/741; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/741>.

Karatson:2020:DMP

- [1408] János Karátson, Balázs Kovács, and Sergey Korotov. Discrete maximum principles for nonlinear elliptic finite element problems on surfaces with boundary. *IMA Journal of Numerical Analysis*, 40(2):1241–1265, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1241/5231969>.

Karlsen:2002:UDA

- [1409] K. H. Karlsen, N. H. Risebro, and J. D. Towers. Upwind difference approximations for degenerate parabolic convection-diffusion equations with a discontinuous coefficient. *IMA Journal of Numerical Analysis*, 22(4):623–664, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220623.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220623.pdf.

Karlsen:2018:ASM

- [1410] K. H. Karlsen and E. B. Storrøsten. Analysis of a splitting method for stochastic balance laws. *IMA Journal of Numerical Analysis*, 38(1):1–56, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/1/3076087>.

Karlsen:2012:CMM

- [1411] Kenneth H. Karlsen and Trygve K. Karper. A convergent mixed method for the Stokes approximation of viscous compressible flow. *IMA Journal of Numerical Analysis*, 32(3):725–764, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/725.full.pdf+html>.

Karlsen:2024:CED

- [1412] Kenneth H. Karlsen and John D. Towers. Compactness estimates for difference schemes for conservation laws with discontinuous flux. *IMA Journal of Numerical Analysis*, 44(6):3313–3353, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3313/7503872>.

Karlsen:1999:USS

- [1413] Kenneth Hivstendahl Karlsen and Knut-Andreas Lie. An unconditionally stable splitting scheme for a class of nonlinear parabolic equations. *IMA Journal of Numerical Analysis*, 19(4):609–635, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190609.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190609.pdf.

Kawohl:1998:CFE

- [1414] Bernhard Kawohl and Christoph Schwab. Convergent finite elements for a class of nonconvex variational problems. *IMA Journal of*

- Numerical Analysis*, 18(1):133–149, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180133.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180133.pdf.
- Kessler:2002:PEE**
- [1418] D. Kessler and J.-F. Scheid. A priori error estimates of a finite-element method for an isothermal phase-field model related to the solidification process of a binary alloy. *IMA Journal of Numerical Analysis*, 22(2):281–305, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220281.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220281.pdf.
- Kay:2001:RLE**
- [1415] David Kay and David Silvester. The reliability of local error estimators for convection-diffusion equations. *IMA Journal of Numerical Analysis*, 21(1):107–122, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210107.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210107.pdf.
- Ketcheson:2015:ASR**
- [1419] David Ketcheson, Lajos Lóczi, and Tihamér A. Kocsis. On the absolute stability regions corresponding to partial sums of the exponential function. *IMA Journal of Numerical Analysis*, 35(3):1426–1455, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1426>.
- Kazashi:2019:QMC**
- [1416] Yoshihito Kazashi. Quasi-Monte Carlo integration with product weights for elliptic PDEs with log-normal coefficients. *IMA Journal of Numerical Analysis*, 39(3):1563–1593, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1563/5001155>.
- Khalifa:1982:CQC**
- [1420] A. K. A. Khalifa and J. C. Eilbeck. Collocation with quadratic and cubic splines. *IMA Journal of Numerical Analysis*, 2(1):111–121, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Kelly:2018:ATS**
- [1417] Cónall Kelly and Gabriel J. Lord. Adaptive time-stepping strategies for nonlinear stochastic systems. *IMA Journal of Numerical Analysis*, 38(3):1523–1549, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1523/4086057>.
- Khan:2021:RPE**
- [1421] Arbaz Khan and David J. Silvester. Robust a posteriori error estimation for mixed finite element approximation of linear poroelasticity. *IMA Journal of Numerical Analysis*, 41(3):2000–2025, July 2021. CODEN

- IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/2000/5919139>.
- Kirsch:1990:CAC**
- [1422] K. E. Khor. A factorization-related method for elliptic partial differential equations with iterative improvement. *IMA Journal of Numerical Analysis*, 10(3):407–424, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Khor:1990:FRM**
- [1423] Ustim Khristenko and Barbara Wohlmuth. Solving time-fractional differential equations via rational approximation. *IMA Journal of Numerical Analysis*, 43(3):1263–1290, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1263/6609534>.
- Khristenko:2023:STF**
- [1424] J. Thomas King and Diego A. Murió. Numerical differentiation by finite-dimensional regularization. *IMA Journal of Numerical Analysis*, 6(1):65–85, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- King:1986:NDF**
- [1425] Keegan L. A. Kirk, Beatrice Riviere, and Rami Masri. Numerical analysis of a hybridized discontinuous Galerkin method for the Cahn–Hilliard problem. *IMA Journal of Numerical Analysis*, 44(5):2752–2792, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2752/7331427>.
- Kirk:2024:NAH**
- [1426] A. Kirsch and P. Monk. Convergence analysis of a coupled finite element and spectral method in acoustic scattering. *IMA Journal of Numerical Analysis*, 10(3):425–447, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Kirsch:1994:ACF**
- [1427] A. Kirsch and P. Monk. An analysis of the coupling of finite-element and Nyström methods in acoustic scattering. *IMA Journal of Numerical Analysis*, 14(4):523–544, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Kiwiel:1985:EPF**
- [1428] Krzysztof C. Kiwiel. An exact penalty function algorithm for nonsmooth convex constrained minimization problems. *IMA Journal of Numerical Analysis*, 5(1):111–119, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Kiwiel:1986:MSC**
- [1429] Krzysztof C. Kiwiel. A method for solving certain quadratic programming problems arising in nonsmooth optimization. *IMA Journal of Numerical Analysis*, 6(2):137–152, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Klein:2003:PEE**
- [1430] Olaf Klein and Claudio Verdi. A posteriori error estimates for a time discrete scheme for a phase-field system of Penrose-Fife type. *IMA Journal of Numerical Analysis*, 23(1):

55–80, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230055.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230055.pdf.

Kloeden:2009:ASV

- [1431] P. E. Kloeden and J. Valero. Attractors of set-valued partial differential equations under discretization. *IMA Journal of Numerical Analysis*, 29(3):690–711, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/690>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/690>.

Kloeden:2003:UAN

- [1432] Peter E. Kloeden and Johannes Schropp. Uniform attractors of nonautonomous index 2 differential algebraic equations under discretization. *IMA Journal of Numerical Analysis*, 23(2):221–239, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230221.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230221.pdf.

Knobloch:2011:SFE

- [1433] Petr Knobloch and Lutz Tobiska. On the stability of finite-element discretizations of convection–diffusion–reaction equations. *IMA Journal of Numerical Analysis*, 31(1):147–164, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/31/1/147.full.pdf+html>.

Koch:2011:VST

[1434] Othmar Koch and Christian Lubich. Variational-splitting time integration of the multi-configuration time-dependent Hartree–Fock equations in electron dynamics. *IMA Journal of Numerical Analysis*, 31(2):379–395, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/379.full.pdf+html>.

Kohler:1993:EEG

- [1435] Peter Köhler. Error estimates for generalized compound quadrature formulas. *IMA Journal of Numerical Analysis*, 13(3):477–491, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Kokkinos:1990:OMA

- [1436] C. A. Kokkinos, N. Papamichael, and A. B. Sideridis. An orthonormalization method for the approximate conformal mapping of multiply-connected domains. *IMA Journal of Numerical Analysis*, 10(3):343–359, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Koley:2012:HOF

- [1437] U. Koley, S. Mishra, N. H. Risebro, and M. Svärd. Higher-order finite difference schemes for the magnetic induction equations with resistivity. *IMA Journal of Numerical Analysis*, 32(3):1173–1193, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1173.full.pdf+html>.

Koley:2018:FDS

- [1438] Ujjwal Koley, Ananta K. Majee, and Guy Vallet. A finite difference scheme for conservation laws driven by Lévy noise. *IMA Journal of Numerical Analysis*, 38(2):998–1050, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/998/3848985>.

Koley:2024:RCN

- [1439] Ujjwal Koley and Guy Vallet. On the rate of convergence of a numerical scheme for fractional conservation laws with noise. *IMA Journal of Numerical Analysis*, 44(3):1372–1405, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1372/7080840>.

Koltracht:1990:CSL

- [1440] I. Koltracht and P. Lancaster. Constraining strategies for linear iterative processes. *IMA Journal of Numerical Analysis*, 10(4):555–567, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Kopec:2015:WBE

- [1441] Marie Kopec. Weak backward error analysis for overdamped Langevin processes. *IMA Journal of Numerical Analysis*, 35(2):583–614, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/583>.

Kopteva:2007:MNP

- [1442] Natalia Kopteva. Maximum norm a posteriori error estimates for a 1D singularly perturbed semilinear reaction–diffusion problem. *IMA Journal of Numerical Analysis*, 27(3):576–592, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/576>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/576>.

Kopteva:2011:PEE

- [1443] Natalia Kopteva and Simona Blanca Savescu. Pointwise error estimates for a singularly perturbed time-dependent semilinear reaction–diffusion problem. *IMA Journal of Numerical Analysis*, 31(2):616–639, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/616.full.pdf+html>.

Koshy:1985:URP

- [1444] Mathew Koshy and R. P. Tewarson. On the use of restricted pseudo-inverses for the unified derivation of quasi-Newton updates. *IMA Journal of Numerical Analysis*, 5(2):141–151, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Kovacs:2018:HOE

- [1445] Balázs Kovács. High-order evolving surface finite element method for parabolic problems on evolving surfaces. *IMA Journal of Numerical Analysis*, 38(1):430–459, January 25, 2018. CODEN IJNADH. ISSN 0272-4979

(print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/430/3074895>.

Kovacs:2018:HOT

- [1446] Balázs Kovács and Christian Andreas Power Guerra. Higher order time discretizations with ALE finite elements for parabolic problems on evolving surfaces. *IMA Journal of Numerical Analysis*, 38(1):460–494, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/460/3098317>.

Kovacs:2023:MRB

- [1447] Balázs Kovács and Buyang Li. Maximal regularity of backward difference time discretization for evolving surface PDEs and its application to nonlinear problems. *IMA Journal of Numerical Analysis*, 43(4):1937–1969, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/1937/6671756>.

Kovacs:2017:NAP

- [1448] Balázs Kovács and Christian Lubich. Numerical analysis of parabolic problems with dynamic boundary conditions. *IMA Journal of Numerical Analysis*, 37(1):1–39, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/1/2669955/Numerical-analysis-of-parabolic-problems-with>.

Kovacs:2023:ASC

- [1449] Mihály Kovács, Annika Lang, and Andreas Petersson. Approximation of SPDE covariance operators by finite elements: a semigroup approach. *IMA Journal of Numerical Analysis*, 43(3):1324–1357, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1324/6591484>.

Kratz:1987:NSM

- [1450] W. Kratz and E. Stickel. Numerical solution of matrix polynomial equations by Newton’s method. *IMA Journal of Numerical Analysis*, 7(3):355–369, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Kraus:2021:VIS

- [1451] Michael Kraus and Tomasz M. Tyrnowski. Variational integrators for stochastic dissipative Hamiltonian systems. *IMA Journal of Numerical Analysis*, 41(2):1318–1367, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1318/5870124>.

Kress:2008:NTR

- [1452] Wendy Kress and Stefan Sauter. Numerical treatment of retarded boundary integral equations by sparse panel clustering. *IMA Journal of Numerical Analysis*, 28(1):162–185, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/162>; <http://imajna.>

oxfordjournals.org/cgi/reprint/
28/1/162.

Kressner:2014:GEP

- [1453] Daniel Kressner, Emre Mengi, Ivica Nakić, and Ninoslav Truhar. Generalized eigenvalue problems with specified eigenvalues. *IMA Journal of Numerical Analysis*, 34(2):480–501, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/480.full.pdf+html>.

Kretzschmar:2016:PEA

- [1454] Fritz Kretzschmar, Andrea Moiola, Ilaria Perugia, and Sascha M. Schnepf. A priori error analysis of space-time Trefftz discontinuous Galerkin methods for wave problems. *IMA Journal of Numerical Analysis*, 36(4):1599–1635, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1599>.

Kreuzer:2012:DCA

- [1455] Christian Kreuzer, Christian A. Möller, Alfred Schmidt, and Kunibert G. Siebert. Design and convergence analysis for an adaptive discretization of the heat equation. *IMA Journal of Numerical Analysis*, 32(4):1375–1403, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1375.full.pdf+html>.

Kreuzer:2016:IOC

- [1456] Christian Kreuzer and Mira Schedensack. Instance optimal Crouzeix–

Raviart adaptive finite element methods for the Poisson and Stokes problems. *IMA Journal of Numerical Analysis*, 36(2):593–617, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/593>.

Kreuzer:2020:QOP

- [1457] Christian Kreuzer and Pietro Zanotti. Quasi-optimal and pressure-robust discretizations of the Stokes equations by new augmented Lagrangian formulations. *IMA Journal of Numerical Analysis*, 40(4):2553–2583, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2553/5680731>.

Krieg:2024:RPO

- [1458] David Krieg and Mathias Sonleitner. Random points are optimal for the approximation of Sobolev functions. *IMA Journal of Numerical Analysis*, 44(3):1346–1371, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1346/7084938>.

Krivko:2014:NIH

- [1459] M. Krivko and M. V. Tretyakov. Numerical integration of the Heath–Jarrow–Morton model of interest rates. *IMA Journal of Numerical Analysis*, 34(1):147–196, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/147.full.pdf+html>.

Kruse:2014:OEE

- [1460] Raphael Kruse. Optimal error estimates of Galerkin finite element methods for stochastic partial differential equations with multiplicative noise. *IMA Journal of Numerical Analysis*, 34(1):217–251, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/217.full.pdf+html>.

Ku:2011:PEE

- [1461] Ja Eun Ku. Pointwise error estimate and asymptotic error expansion inequalities for a stabilized Galerkin method. *IMA Journal of Numerical Analysis*, 31(1):165–187, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/165.full.pdf+html>.

Ku:2016:LPE

- [1462] JaEun Ku. Localized pointwise error estimates for direct flux approximation. *IMA Journal of Numerical Analysis*, 36(3):1410–1431, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1410>.

Kucera:2014:DUE

- [1463] Václav Kucera. On diffusion-uniform error estimates for the DG method applied to singularly perturbed problems. *IMA Journal of Numerical Analysis*, 34(2):820–861, April 2014. CODEN IJNADH. ISSN

0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/820.full.pdf+html>.

Kucera:2019:TGE

- [1464] Václav Kucera and Chi-Wang Shu. On the time growth of the error of the DG method for advective problems. *IMA Journal of Numerical Analysis*, 39(2):687–712, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/687/4961330>.

Kuhn:1998:CFD

- [1465] T. Kühn. Convergence of a fully discrete approximation for advected mean curvature flows. *IMA Journal of Numerical Analysis*, 18(4):595–634, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180595.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180595.pdf.

Kulikov:2013:CGE

- [1466] Gennady Yu. Kulikov. Cheap global error estimation in some Runge–Kutta pairs. *IMA Journal of Numerical Analysis*, 33(1):136–163, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/136.full.pdf+html>.

Kulkarni:1997:UEI

- [1467] Rekha P. Kulkarni. Use of extrapolation for improving the order of conver-

gence of eigenvalue approximations. *IMA Journal of Numerical Analysis*, 17(2):271–284, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170271.sgm.abs.html.

Kumar:2025:PHD

- [1468] Nishant Kumar, J J W van der Vegt, and H J Zwart. Port-Hamiltonian discontinuous Galerkin finite element methods. *IMA Journal of Numerical Analysis*, 45(1):354–403, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/354/7657985>.

Kumar:1987:SCT

- [1469] Sunil Kumar. Superconvergence of a collocation-type method for Hammerstein equations. *IMA Journal of Numerical Analysis*, 7(3):313–325, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Kunert:2001:PEE

- [1470] Gerd Kunert. *A posteriori* L_2 error estimation on anisotropic tetrahedral finite element meshes. *IMA Journal of Numerical Analysis*, 21(2):503–523, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210503abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210503.pdf.

Kunert:2005:PEE

- [1471] Gerd Kunert. *A posteriori* H^1 error estimation for a singularly perturbed re-

action diffusion problem on anisotropic meshes. *IMA Journal of Numerical Analysis*, 25(2):408–428, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/408>; <http://imanum.oupjournals.org/cgi/reprint/25/2/408>.

Kunkel:1989:ECS

- [1472] P. Kunkel. Efficient computation of singular points. *IMA Journal of Numerical Analysis*, 9(3):421–433, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Kunkel:1996:TBA

- [1473] P. Kunkel. A tree-based analysis of a family of augmented systems for the computation of singular points. *IMA Journal of Numerical Analysis*, 16(4):501–527, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160501.sgm.abs.html.

Kuo:1981:CMN

- [1474] Pên Yu Kuo and J. M. Sanz-Serna. Convergence of methods for the numerical solution of the Korteweg–de Vries equation. *IMA Journal of Numerical Analysis*, 1(2):215–221, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Kuznetsov:2022:RCG

- [1475] Alexey Kuznetsov and Justin Miles. On the rate of convergence of the Gaver–Stehfest algorithm. *IMA Journal of Numerical Analysis*, 42(2):1645–1664, April 2022. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1645/6228274>.

Kyza:2011:ECT

- [1479] Irene Kyza, Charalambos Makridakis, and Michael Plexousakis. Error control for time-splitting spectral approximations of the semiclassical Schrödinger equation. *IMA Journal of Numerical Analysis*, 31(2):416–441, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/416.full.pdf+html>.

Kwon:2022:CCE

- [1476] Young-Sam Kwon and Antonín Novotný. Consistency, convergence and error estimates for a mixed finite element-finite volume scheme to compressible Navier–Stokes equations with general inflow/outflow boundary data. *IMA Journal of Numerical Analysis*, 42(1):107–164, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/107/6139193>.

Lai:2002:FSD

- [1480] Ming-Chih Lai, Wen-Wei Lin, and Weichung Wang. A fast spectral/difference method without pole conditions for Poisson-type equations in cylindrical and spherical geometries. *IMA Journal of Numerical Analysis*, 22(4):537–548, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220537.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220537.pdf.

Kyoya:2020:CCM

- [1477] Shunki Kyoya and Ken’ichiro Tanaka. Construction of conformal maps based on the locations of singularities for improving the double exponential formula. *IMA Journal of Numerical Analysis*, 40(4):2746–2776, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2746/5614270>.

Kyprianou:2018:UWS

- [1478] Andreas E. Kyprianou, Ana Osojnik, and Tony Shardlow. Unbiased ‘walk-on-spheres’ Monte Carlo methods for the fractional Laplacian. *IMA Journal of Numerical Analysis*, 38(3):1550–1578, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1550/4090986>.

Lakkis:2022:LSG

- [1481] Omar Lakkis and Amireh Mousavi. A least-squares Galerkin approach to gradient and Hessian recovery for nondivergence-form elliptic equations. *IMA Journal of Numerical Analysis*, 42(3):2151–2189, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2151/6366397>.

Lakkis:2012:GRA

- [1482] Omar Lakkis and Tristan Pryer. Gradient recovery in adaptive finite-element methods for parabolic problems. *IMA Journal of Numerical Analysis*, 32(1):246–278, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/246.full.pdf+html>.

Lamba:2007:AEM

- [1483] H. Lamba, J. C. Mattingly, and A. M. Stuart. An adaptive Euler–Maruyama scheme for SDEs: convergence and stability. *IMA Journal of Numerical Analysis*, 27(3):479–506, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/479>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/479>.

Lamichhane:2009:ISS

- [1484] Bishnu P. Lamichhane. Inf-sup stable finite-element pairs based on dual meshes and bases for nearly incompressible elasticity. *IMA Journal of Numerical Analysis*, 29(2):404–420, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/404>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/404>.

Langdon:2001:BIM

- [1485] S. Langdon and I. G. Graham. Boundary integral methods for singularly per-

turbed boundary value problems. *IMA Journal of Numerical Analysis*, 21(1):217–237, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210217abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210217.pdf.

Lanteri:2013:CDG

- [1486] Stéphane Lanteri and Claire Scheid. Convergence of a discontinuous Galerkin scheme for the mixed time-domain Maxwell’s equations in dispersive media. *IMA Journal of Numerical Analysis*, 33(2):432–459, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/432.full.pdf+html>.

Larson:2020:SHO

- [1487] Mats G. Larson and Sara Zahedi. Stabilization of high order cut finite element methods on surfaces. *IMA Journal of Numerical Analysis*, 40(3):1702–1745, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1702/5479342>.

Larsson:2024:SRB

- [1488] Elisabeth Larsson and Robert Schaback. Scaling of radial basis functions. *IMA Journal of Numerical Analysis*, 44(2):1130–1152, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/1130/7192242>.

Larsson:2011:FEA

- [1489] Stig Larsson and Ali Mesforush. Finite-element approximation of the linearized Cahn–Hilliard–Cook equation. *IMA Journal of Numerical Analysis*, 31(4):1315–1333, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1315.full.pdf+html>.

Larsson:2010:CGM

- [1490] Stig Larsson and Fardin Saedpanah. The continuous Galerkin method for an integro-differential equation modeling dynamic fractional order viscoelasticity. *IMA Journal of Numerical Analysis*, 30(4):964–986, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/964.full.pdf+html>.

Larsson:1991:FEM

- [1491] Stig Larsson, Vidar Thomée, and Lars B. Wahlbin. Finite-element methods for a strongly damped wave equation. *IMA Journal of Numerical Analysis*, 11(1):115–142, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Latouche:1994:NIN

- [1492] Guy Latouche. Newton’s iteration for non-linear equations in Markov chains. *IMA Journal of Numerical Analysis*, 14(4):583–598, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Laurita:2012:QMC

- [1493] Concetta Laurita. A quadrature method for Cauchy singular integral equations with index -1 . *IMA Journal of Numerical Analysis*, 32(3):1071–1095, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1071.full.pdf+html>.

LeTallec:1986:NSV

- [1494] Patrick Le Tallec. Numerical solution of viscoplastic flow problems by augmented Lagrangians. *IMA Journal of Numerical Analysis*, 6(2):185–219, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Leake:1989:AOS

- [1495] D. Leake and H. Mukai. Acceleration of one-step stationary root-finding algorithms. *IMA Journal of Numerical Analysis*, 9(1):81–93, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lechleiter:2012:SVI

- [1496] Armin Lechleiter and Dinh Liem Nguyen. Spectral volumetric integral equation methods for acoustic medium scattering in a 3D waveguide. *IMA Journal of Numerical Analysis*, 32(3):813–844, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/813.full.pdf+html>.

Lederer:2018:PRS

- [1497] Philip L. Lederer and Joachim Schöberl. Polynomial robust stability

- analysis for $H(\text{div})$ -conforming finite elements for the Stokes equations. *IMA Journal of Numerical Analysis*, 38(4): 1832–1860, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1832/4096776>.
- [1498] Veerle Ledoux, Marnix Van Daele, and Guido Vanden Berghe. Efficient numerical solution of the one-dimensional Schrödinger eigenvalue problem using Magnus integrators. *IMA Journal of Numerical Analysis*, 30(3):751–776, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/751>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/751>.
- [1499] Mun Bae Lee, Yeon Ju Lee, and Jungho Yoon. Sobolev-type L_p -approximation orders of radial basis function interpolation to functions in fractional Sobolev spaces. *IMA Journal of Numerical Analysis*, 32(1):279–293, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/279.full.pdf+html>.
- [1500] Reinhard Lehmann. Computable error bounds in the finite-element method. *IMA Journal of Numerical Analysis*, 6(3):265–271, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- [1501] Christoph Lehrenfeld and Arnold Reusken. Analysis of a high-order unfitted finite element method for elliptic interface problems. *IMA Journal of Numerical Analysis*, 38(3):1351–1387, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1351/4084723>.
- [1502] Benedict Leimkuhler, Charles Matthews, and Gabriel Stoltz. The computation of averages from equilibrium and nonequilibrium Langevin molecular dynamics. *IMA Journal of Numerical Analysis*, 36(1):13–79, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/13>.
- [1503] A. Leitão, F. Margotti, and B. F. Svaiter. Range-relaxed criteria for choosing the Lagrange multipliers in the Levenberg–Marquardt method. *IMA Journal of Numerical Analysis*, 41(4):2962–2989, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2962/5906072>.
- [1504] Tony Lelièvre, Gabriel Stoltz, and Wei Zhang. Multiple projection Markov chain Monte Carlo algorithms on submanifolds. *IMA Journal of Numerical Analysis*, 43(2):737–788, March 2023.

Lehrenfeld:2018:AHO**Ledoux:2010:ENS****Leimkuhler:2016:CAE****Lee:2012:STA****Leitao:2021:RRC****Lehmann:1986:CEB****Lelièvre:2023:MPM**

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/737/6549751>.

Lemaire:2021:BHH

- [1505] Simon Lemaire. Bridging the hybrid high-order and virtual element methods. *IMA Journal of Numerical Analysis*, 41(1):549–593, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/549/5671601>.

Leng:2024:AIP

- [1506] Haitao Leng and Huangxin Chen. Adaptive interior penalty hybridized discontinuous Galerkin methods for Darcy flow in fractured porous media. *IMA Journal of Numerical Analysis*, 44(4):2165–2197, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2165/7225492>.

Leok:2012:PCV

- [1507] Melvin Leok and Tatiana Shingel. Prolongation-collocation variational integrators. *IMA Journal of Numerical Analysis*, 32(3):1194–1216, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1194.full.pdf+html>.

Leok:2011:DHV

- [1508] Melvin Leok and Jingjing Zhang. Discrete Hamiltonian variational integrators. *IMA Journal of Numerical Analysis*, 31(4):1497–1532, October 2011. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1497.full.pdf+html>.

LeVeque:1988:FAS

- [1509] Randall J. LeVeque and Lloyd N. Trefethen. Fourier analysis of the SOR iteration. *IMA Journal of Numerical Analysis*, 8(3):273–279, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Levesley:1994:CCM

- [1510] J. Levesley, D. M. Hough, and S. N. Chandler-Wilde. A Chebyshev collocation method for solving Symm’s integral equation for conformal mapping: a partial error analysis. *IMA Journal of Numerical Analysis*, 14(1):57–79, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Levin:1986:MRS

- [1511] David Levin. Multidimensional reconstruction by set-valued approximations. *IMA Journal of Numerical Analysis*, 6(2):173–184, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Levine:1985:SRG

- [1512] Nick Levine. Superconvergent recovery of the gradient from piecewise linear finite element approximations. *IMA Journal of Numerical Analysis*, 5(4):407–427, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Levitin:2004:SPS

- [1513] Michael Levitin and Eugene Shargorodsky. Spectral pollution and

- second-order relative spectra for self-adjoint operators. *IMA Journal of Numerical Analysis*, 24(3):393–416, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240393.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240393.pdf.
- Levy:2005:SSD**
- [1514] Doron Levy. A stable semi-discrete central scheme for the two-dimensional incompressible Euler equations. *IMA Journal of Numerical Analysis*, 25(3):507–522, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/507>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/507>.
- Li:2022:MRM**
- [1515] Buyang Li. Maximal regularity of multistep fully discrete finite element methods for parabolic equations. *IMA Journal of Numerical Analysis*, 42(2):1700–1734, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1700/6209613>.
- Li:2024:CFE**
- [1516] Buyang Li, Haigang Li, and Zongze Yang. Convergent finite element methods for the perfect conductivity problem with close-to-touching inclusions. *IMA Journal of Numerical Analysis*, 44(6):3280–3312, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3280/7378011>.
- Li:2010:NCR**
- [1517] Buyang Li and Weiwei Sun. Newton–Cotes rules for Hadamard finite-part integrals on an interval. *IMA Journal of Numerical Analysis*, 30(4):1235–1255, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1235.full.pdf+html>.
- Li:2023:OCA**
- [1518] Buyang Li, Yinhua Xia, and Zongze Yang. Optimal convergence of arbitrary Lagrangian–Eulerian isoparametric finite element methods for parabolic equations in an evolving domain. *IMA Journal of Numerical Analysis*, 43(1):501–534, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/501/6504751>.
- Li:2024:GSO**
- [1519] Chao Li and Xiaojun Chen. Group sparse optimization for inpainting of random fields on the sphere. *IMA Journal of Numerical Analysis*, 44(5):3028–3058, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/3028/7271763>.
- Li:1983:FEF**
- [1520] Chin Hsien Li. A finite-element front-tracking enthalpy method for Stefan problems. *IMA Journal of Numerical*

Analysis, 3(1):87–107, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Li:2023:FEM

Li:2006:NMR

- [1521] Chong Li and Jinhua Wang. Newton’s method on Riemannian manifolds: Smale’s point estimate theory under the γ -condition. *IMA Journal of Numerical Analysis*, 26(2):228–251, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/228>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/228>.

Li:2018:EAV

- [1522] Guanglian Li, Daniel Peterseim, and Mira Schedensack. Error analysis of a variational multiscale stabilization for convection-dominated diffusion equations in two dimensions. *IMA Journal of Numerical Analysis*, 38(3):1229–1253, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1229/3871420>.

Li:2023:LRE

- [1523] Hang Li and Chunmei Su. Low regularity exponential-type integrators for the “good” Boussinesq equation. *IMA Journal of Numerical Analysis*, 43(6):3656–3684, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3656/6991353>.

- [1524] Hengguang Li, Peimeng Yin, and Zhimin Zhang. A C^0 finite element method for the biharmonic problem with Navier boundary conditions in a polygonal domain. *IMA Journal of Numerical Analysis*, 43(3):1779–1801, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1779/6619550>.

Li:2003:LGC

- [1525] Huiyuan Li, Hua Wu, and Heping Ma. The Legendre Galerkin-Chebyshev collocation method for Burgers-like equations. *IMA Journal of Numerical Analysis*, 23(1):109–124, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230109.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230109.pdf.

Li:2003:NSL

- [1526] Journal Changjun Li, Zheng Li, David J. Evans, and Tie Zhang. A note on an SOR-like method for augmented systems. *IMA Journal of Numerical Analysis*, 23(4):581–592, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230581.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230581.pdf.

Li:2022:CNV

- [1527] Meng Li, Jikun Zhao, Chengming

- Huang, and Shaochun Chen. Conforming and nonconforming VEMs for the fourth-order reaction-subdiffusion equation: a unified framework. *IMA Journal of Numerical Analysis*, 42(3):2238–2300, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2238/6275667>.
- Li:2022:NMS**
- [1528] Min Li, Chengming Huang, and Yaozhong Hu. Numerical methods for stochastic Volterra integral equations with weakly singular kernels. *IMA Journal of Numerical Analysis*, 42(3):2656–2683, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2656/6310908>.
- Li:2011:CDF**
- [1529] Qingna Li and Dong-Hui Li. A class of derivative-free methods for large-scale nonlinear monotone equations. *IMA Journal of Numerical Analysis*, 31(4):1625–1635, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1625.full.pdf+html>.
- Li:2022:DLS**
- [1530] Ruo Li, Qicheng Liu, and Fanyi Yang. A discontinuous least squares finite element method for time-harmonic Maxwell equations. *IMA Journal of Numerical Analysis*, 42(1):817–839, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/817/6110400>.
- Li:2011:SNA**
- [1531] Tiexiang Li, Eric King-Wah Chu, Jong Juang, and Wen-Wei Lin. Solution of a nonsymmetric algebraic Riccati equation from a one-dimensional multistate transport model. *IMA Journal of Numerical Analysis*, 31(4):1453–1467, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1453.full.pdf+html>.
- Li:2024:AFM**
- [1532] Tongtong Li, Sergio Caucao, and Ivan Yotov. An augmented fully mixed formulation for the quasistatic Navier–Stokes–Biot model. *IMA Journal of Numerical Analysis*, 44(2):1153–1210, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/1153/7199400>.
- Li:2024:UES**
- [1533] Wei Li, Pengzhan Huang, and Yinnian He. An unconditionally energy stable finite element scheme for a nonlinear fluid–fluid interaction model. *IMA Journal of Numerical Analysis*, 44(1):157–191, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/157/7000821>.
- Li:2021:QSE**
- [1534] Wenbo Li and Ricardo H. Nochetto. Quantitative stability and error es-

timates for optimal transport plans. *IMA Journal of Numerical Analysis*, 41(3):1941–1965, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/1941/5879877>.

Li:2024:TSM

- [1535] Wenbo Li and Abner J. Salgado. Two-scale methods for the normalized infinity Laplacian: rates of convergence. *IMA Journal of Numerical Analysis*, 44(5):2603–2666, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2603/7326027>.

Li:2023:SPA

- [1536] Xiao Li, Zhonghua Qiao, and Cheng Wang. Stabilization parameter analysis of a second-order linear numerical scheme for the nonlocal Cahn–Hilliard equation. *IMA Journal of Numerical Analysis*, 43(2):1089–1114, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/1089/6528488>.

Li:2023:NAM

- [1537] Xiaoxu Li, Huajie Chen, and Xingyu Gao. Numerical analysis of multiple scattering theory for electronic structure calculations. *IMA Journal of Numerical Analysis*, 43(4):2228–2264, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2228/6665246>.

Li:2019:CEN

- [1538] Xiaoyue Li, Xuerong Mao, and George Yin. Corrigendum to: Explicit numerical approximations for stochastic differential equations in finite and infinite horizons: truncation methods, convergence in p th moment and stability. *IMA Journal of Numerical Analysis*, 39(4):2168, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/2168/5059705>. See [1539].

Li:2019:ENA

- [1539] Xiaoyue Li, Xuerong Mao, and George Yin. Explicit numerical approximations for stochastic differential equations in finite and infinite horizons: truncation methods, convergence in p th moment and stability. *IMA Journal of Numerical Analysis*, 39(2):847–892, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/847/4964837>. See corrigendum [1538].

Li:2012:GQA

- [1540] Xingjie Helen Li and Mitchell Luskin. A generalized quasinonlocal atomistic-to-continuum coupling method with finite-range interaction. *IMA Journal of Numerical Analysis*, 32(2):373–393, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/373.full.pdf+html>.

Li:2022:LOD

- [1541] Xu Li and Hongxing Rui. A low-order divergence-free $h(\text{div})$ -conforming fi-

nite element method for Stokes flows. *IMA Journal of Numerical Analysis*, 42(4):3711–3734, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3711/6438150>.

Li:2025:VDA

- [1542] Xuejian Li, Xiaoming He, Wei Gong, and Craig C Douglas. Variational data assimilation with finite-element discretization for second-order parabolic interface equation. *IMA Journal of Numerical Analysis*, 45(1):451–493, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/451/7668340>.

Li:2023:CNS

- [1543] Yang Li and Bangwei She. On convergence of numerical solutions for the compressible MHD system with weakly divergence-free magnetic field. *IMA Journal of Numerical Analysis*, 43(4):2169–2197, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2169/6652789>.

Li:2023:SCE

- [1544] Yun Li, Xuerong Mao, Qingshuo Song, Fuke Wu, and George Yin. Strong convergence of Euler–Maruyama schemes for McKean–Vlasov stochastic differential equations under local Lipschitz conditions of state variables. *IMA Journal of Numerical Analysis*, 43(2):1001–1035, March 2023. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/1001/6517101>.

Li:2022:RBE

- [1545] Yuwen Li and Ludmil T. Zikatanov. Residual-based *a posteriori* error estimates of mixed methods for a three-field Biot’s consolidation model. *IMA Journal of Numerical Analysis*, 42(1):620–648, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/620/5920450>.

Li:2005:PEO

- [1546] Zhengfeng Li, Michael R. Osborne, and Tania Prvan. Parameter estimation of ordinary differential equations. *IMA Journal of Numerical Analysis*, 25(2):264–285, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/264>; <http://imanum.oupjournals.org/cgi/reprint/25/2/264>.

Liang:1999:FEM

- [1547] Dong Liang and Bo Zhang. A finite element method for a unidimensional single-phase nonlinear free boundary problem in groundwater flow. *IMA Journal of Numerical Analysis*, 19(4):563–581, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190563.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190563.pdf.

Liang:2020:CMI

- [1548] Hui Liang and Hermann Brunner. Collocation methods for integro-differential algebraic equations with index 1. *IMA Journal of Numerical Analysis*, 40(2):850–885, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/850/5365252>.

Liang:2024:GCA

- [1549] Hui Liang and Martin Stynes. A general collocation analysis for weakly singular Volterra integral equations with variable exponent. *IMA Journal of Numerical Analysis*, 44(5):2725–2751, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2725/7274486>.

Liang:2025:SEO

- [1550] Qigang Liang, Xuejun Xu, and Shangyou Zhang. On a sharp estimate of overlapping Schwarz methods in $H(\text{curl}; \Omega)$ and $H(\text{div}; \Omega)$. *IMA Journal of Numerical Analysis*, 45(2):1009–1027, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/1009/7681961>.

Liang:2022:BAE

- [1551] Xin Liang, Zhen-Chen Guo, Tsung-Ming Huang, Tiexiang Li, and Wen-Wei Lin. Bifurcation analysis of the eigenstructure of the discrete single-curl operator in three-dimensional Maxwell’s equations with Pasteur media. *IMA Journal of Numerical Anal-*

ysis, 42(4):3735–3770, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3735/6415276>.

Liao:2016:ERS

- [1552] Qifeng Liao and David Silvester. Erratum to “Robust stabilized Stokes approximation methods for highly stretched grids”. *IMA Journal of Numerical Analysis*, 36(2):984, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/984>. See [1486].

Liesen:2016:PNI

- [1553] Jörg Liesen. Pták’s nondiscrete induction and its application to matrix iterations. *IMA Journal of Numerical Analysis*, 36(3):1242–1260, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1242>.

Lietaert:2022:ARA

- [1554] Pieter Lietaert, Karl Meerbergen, Javier Pérez, and Bart Vandereycken. Automatic rational approximation and linearization of nonlinear eigenvalue problems. *IMA Journal of Numerical Analysis*, 42(2):1087–1115, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1087/6139194>.

Lim:2024:NAE

- [1555] Dong-Young Lim, Ariel Neufeld, Sotirios Sabanis, and Ying Zhang. Non-

- asymptotic estimates for TUSLA algorithm for non-convex learning with applications to neural networks with ReLU activation function. *IMA Journal of Numerical Analysis*, 44(3):1464–1559, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1464/7192418>.
- Lin:2005:SEN**
- [1556] Qun Lin, Lutz Tobiska, and Aihui Zhou. Superconvergence and extrapolation of non-conforming low order finite elements applied to the Poisson equation. *IMA Journal of Numerical Analysis*, 25(1):160–181, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/160>; <http://imanum.oupjournals.org/cgi/reprint/25/1/160>.
- Lin:2008:MNM**
- [1557] Yiqin Lin, Liang Bao, and Yimin Wei. A modified Newton method for solving non-symmetric algebraic Riccati equations arising in transport theory. *IMA Journal of Numerical Analysis*, 28(2):215–224, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/215>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/215>.
- Liao:2022:ABI**
- [1558] Hong lin Liao, Bingquan Ji, and Luming Zhang. An adaptive BDF2 implicit time-stepping method for the phase field crystal model. *IMA Journal of Numerical Analysis*, 42(1):649–679, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/649/5974147>.
- Liao:2024:NEE**
- [1559] Hong lin Liao and Yuanyuan Kang. L^2 norm error estimates of BDF methods up to fifth-order for the phase field crystal model. *IMA Journal of Numerical Analysis*, 44(4):2138–2164, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2138/7223959>.
- Lindner:2021:SCH**
- [1560] Felix Lindner and Holger Stroot. Strong convergence of a half-explicit Euler scheme for constrained stochastic mechanical systems. *IMA Journal of Numerical Analysis*, 41(4):2562–2607, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2562/6184144>.
- Linke:2017:OVE**
- [1561] A. Linke, C. Merdon, and W. Wollner. Optimal L^2 velocity error estimate for a modified pressure-robust Crouzeix–Raviart Stokes element. *IMA Journal of Numerical Analysis*, 37(1):354–374, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/354/2669970> Optimal-L2-velocity-error-estimate-for-a-modified.

Linss:2000:AGF

- [1562] Torsten Linß. Analysis of a Galerkin finite element method on a Bakhvalov-Shishkin mesh for a linear convection-diffusion problem. *IMA Journal of Numerical Analysis*, 20(4):621–632, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200621abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200621.pdf.

Linss:2000:NSI

- [1563] Torsten Linß. On the numerical solution of involutive ordinary differential systems. *IMA Journal of Numerical Analysis*, 20(4):561–599, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200561abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200561.pdf.

Linss:2004:EEF

- [1564] Torsten Linss. Error expansion for a first-order upwind difference scheme applied to a model convection-diffusion problem. *IMA Journal of Numerical Analysis*, 24(2):239–253, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240239.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240239.pdf.

Linss:2009:LAM

- [1565] Torsten Linß and Niall Madden. Layer-adapted meshes for a linear system of coupled singularly perturbed reaction-diffusion problems. *IMA Journal of Numerical Analysis*, 29(1):109–125, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Linss:2024:UAM

- [1566] Torsten Linß, Martin Ossadnik, and Goran Radojev. A unified approach to maximum-norm *a posteriori* error estimation for second-order time discretizations of parabolic equations. *IMA Journal of Numerical Analysis*, 44(3):1644–1659, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1644/7202282>.

Lipman:2010:APS

- [1567] Yaron Lipman and David Levin. Approximating piecewise-smooth functions. *IMA Journal of Numerical Analysis*, 30(4):1159–1183, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1159.full.pdf+html>.

Liu:2009:TSS

- [1568] Fang Liu, Niall Madden, Martin Stynes, and Aihui Zhou. A two-scale sparse grid method for a singularly perturbed reaction-diffusion problem in two dimensions. *IMA Journal of Numerical Analysis*, 29(4):986–1007, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

- (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/986>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/986>.
- Liu:2019:AMP**
- [1569] Hailiang Liu, Yunqing Huang, Wenying Lu, and Nianyu Yi. On accuracy of the mass-preserving DG method to multi-dimensional Schrödinger equations. *IMA Journal of Numerical Analysis*, 39(2):760–791, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/760/4959865>.
- Liu:2024:CRI**
- [1570] Hongwei Liu, Ting Wang, and Zexian Liu. Convergence rate of inertial forward-backward algorithms based on the local error bound condition. *IMA Journal of Numerical Analysis*, 44(2):1003–1028, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/1003/7179403>.
- Liu:2006:MSR**
- [1571] Hongyu Liu and Kai Zhang. Multi-symplectic Runge–Kutta-type methods for Hamiltonian wave equations. *IMA Journal of Numerical Analysis*, 26(2):252–271, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/252>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/252>.
- Liu:2013:MPS**
- [1572] Jie Liu. A mass-preserving splitting scheme for the stochastic Schrödinger equation with multiplicative noise. *IMA Journal of Numerical Analysis*, 33(4):1469–1479, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1469.full.pdf+html>.
- Liu:2023:AMD**
- [1573] Kaifang Liu, Dietmar Gallistl, Matthias Schlottbom, and J J W van der Vegt. Analysis of a mixed discontinuous Galerkin method for the time-harmonic Maxwell equations with minimal smoothness requirements. *IMA Journal of Numerical Analysis*, 43(4):2320–2351, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2320/6668830>.
- Liu:2025:MIM**
- [1574] Kang Liu and Laurent Pfeiffer. A mesh-independent method for second-order potential mean field games. *IMA Journal of Numerical Analysis*, 45(2):1226–1266, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/1226/7759639>.
- Liu:1990:SMN**
- [1575] M. Z. Liu and M. N. Spijker. The stability of the θ -methods in the numerical solution of delay differential equations. *IMA Journal of Numerical Analysis*, 10(1):31–48, January 1990. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Liu:2020:EPM

- [1576] Tianxiang Liu, Zhaosong Lu, Xiaojun Chen, and Yu-Hong Dai. An exact penalty method for semidefinite-box-constrained low-rank matrix optimization problems. *IMA Journal of Numerical Analysis*, 40(1):563–586, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/563/5142420>.

Liu:2018:SES

- [1577] Xiaowei Liu, Martin Stynes, and Jin Zhang. Supercloseness of edge stabilization on Shishkin rectangular meshes for convection–diffusion problems with exponential layers. *IMA Journal of Numerical Analysis*, 38(4):2105–2122, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2105/4108203>.

Liu:2022:LFF

- [1578] Yujie Liu and Junping Wang. A locking-free P_0 finite element method for linear elasticity equations on polytopal partitions. *IMA Journal of Numerical Analysis*, 42(4):3464–3498, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3464/6338335>.

Liu:2020:SAM

- [1579] Zhihui Liu and Zhonghua Qiao. Strong approximation of monotone stochastic

partial differential equations driven by white noise. *IMA Journal of Numerical Analysis*, 40(2):1074–1093, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1074/5262676>.

Loach:1991:BLS

- [1580] P. D. Loach and A. J. Wathen. On the best least squares approximation of continuous functions using linear splines with free knots. *IMA Journal of Numerical Analysis*, 11(3):393–409, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lombardi:2011:IEE

- [1581] Ariel L. Lombardi. Interpolation error estimates for edge elements on anisotropic meshes. *IMA Journal of Numerical Analysis*, 31(4):1683–1712, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1683.full.pdf+html>.

Lopez:1983:SAB

- [1582] Luciano Lopez. Stability and asymptotic behaviour for the numerical solution of a reaction-diffusion model for a deterministic diffusive epidemic. *IMA Journal of Numerical Analysis*, 3(3):341–351, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lopez-Fernandez:2013:GCQ

- [1583] Maria Lopez-Fernandez and Stefan Sauter. Generalized convolution quadrature with variable time stepping. *IMA Journal of Numerical*

cal Analysis, 33(4):1156–1175, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1156.full.pdf+html>.

Lopez-Gomez:1992:SSM

- [1584] J. López-Gómez, J. C. Eilbeck, M. Molina, and K. N. Duncan. Structure of solution manifolds in a strongly coupled elliptic system. *IMA Journal of Numerical Analysis*, 12(3):405–428, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

LopezMarcos:1988:SCN

- [1585] J. C. López Marcos and J. M. Sanz-Serna. Stability and convergence in numerical analysis. III. Linear investigation of nonlinear stability. *IMA Journal of Numerical Analysis*, 8(1):71–84, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

LopezMarcos:1994:NAP

- [1586] M. Á. López Marcos. Numerical analysis of pseudospectral methods for the Kuramoto–Sivashinsky equation. *IMA Journal of Numerical Analysis*, 14(2):233–242, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lorcher:2007:LWT

- [1587] Frieder Lörcher and Claus-Dieter Munz. Lax–Wendroff-type schemes of arbitrary order in several space dimensions. *IMA Journal of Numerical Analysis*, 27(3):593–615, July

2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/593>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/593>.

Lord:2004:NSS

- [1588] Gabriel J. Lord and Jacques Rouge-mont. A numerical scheme for stochastic PDEs with Gevrey regularity. *IMA Journal of Numerical Analysis*, 24(4):587–604, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/587>; <http://imanum.oupjournals.org/cgi/reprint/24/4/587>.

Lord:2013:SEI

- [1589] Gabriel J. Lord and Antoine Tambue. Stochastic exponential integrators for the finite element discretization of SPDEs for multiplicative and additive noise. *IMA Journal of Numerical Analysis*, 33(2):515–543, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/515.full.pdf+html>.

Lu:1993:SBM

- [1590] Lian Hua Lu. The stability of the block θ -methods. *IMA Journal of Numerical Analysis*, 13(1):101–114, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lu:2022:HMH

- [1591] Peipei Lu, Andreas Rupp, and Guido

Kanschat. Homogeneous multigrid for HDG. *IMA Journal of Numerical Analysis*, 42(4):3135–3153, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3135/6323813>.

Lu:2024:HMH

- [1592] Peipei Lu, Wei Wang, Guido Kanschat, and Andreas Rupp. Homogeneous multigrid for HDG applied to the Stokes equation. *IMA Journal of Numerical Analysis*, 44(5):3124–3152, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/3124/7326023>.

Lube:2002:SFE

- [1593] Gert Lube and Maxim A. Olshanskii. Stable finite-element calculation of incompressible flows using the rotation form of convection. *IMA Journal of Numerical Analysis*, 22(3):437–461, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220437.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220437.pdf.

Lubich:1983:SLM

- [1594] Ch. Lubich. On the stability of linear multistep methods for Volterra convolution equations. *IMA Journal of Numerical Analysis*, 3(4):439–465, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lubich:1986:SAC

- [1595] Ch. Lubich. A stability analysis of convolution quadratures for Abel–Volterra integral equations. *IMA Journal of Numerical Analysis*, 6(1):87–101, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lubich:1987:FLM

- [1596] Ch. Lubich. Fractional linear multistep methods for Abel–Volterra integral equations of the first kind. *IMA Journal of Numerical Analysis*, 7(1):97–106, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lubich:1995:LIT

- [1597] Ch. Lubich and A. Ostermann. Linearly implicit time discretization of non-linear parabolic equations. *IMA Journal of Numerical Analysis*, 15(4):555–583, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lubich:2013:BDT

- [1598] Christian Lubich, Dhia Mansour, and Chandrasekhar Venkataraman. Backward difference time discretization of parabolic differential equations on evolving surfaces. *IMA Journal of Numerical Analysis*, 33(4):1365–1385, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1365.full.pdf+html>.

Lucchi:2023:SST

- [1599] Aurelien Lucchi and Jonas Kohler. A sub-sampled tensor method for non-convex optimization. *IMA Journal*

of *Numerical Analysis*, 43(5):2856–2891, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2856/6748196>.

Ludwig:2016:CSF

- [1600] Lars Ludwig and Hans-Goerg Roos. Convergence and supercloseness of a finite element method for a singularly perturbed convection-diffusion problem on an L-shaped domain. *IMA Journal of Numerical Analysis*, 36(3):1261–1280, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1261>.

Ludwig:2014:FES

- [1601] Lars Ludwig and Hans-Görg Roos. Finite element superconvergence on Shishkin meshes for convection-diffusion problems with corner singularities. *IMA Journal of Numerical Analysis*, 34(2):782–799, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/782.full.pdf+html>.

Lui:2009:LNO

- [1602] S. H. Lui. A Lions non-overlapping domain decomposition method for domains with an arbitrary interface. *IMA Journal of Numerical Analysis*, 29(2):332–349, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/332>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/332>.

[oxfordjournals.org/cgi/reprint/29/2/332](http://imajna.oxfordjournals.org/cgi/reprint/29/2/332).

Lukacova-Medvidova:2025:CEE

- [1603] Mária Lukáčová-Medviďová, Bangwei She, and Yuhuan Yuan. Convergence and error estimates of a penalization finite volume method for the compressible Navier–Stokes system. *IMA Journal of Numerical Analysis*, 45(2):1054–1101, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/1054/7681963>.

Lund:1989:SSG

- [1604] John Lund, Kenneth L. Bowers, and Kelly M. McArthur. Symmetrization of the sinc-Galerkin method with block techniques for elliptic equations. *IMA Journal of Numerical Analysis*, 9(1):29–46, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lund:1984:SCM

- [1605] John R. Lund and Bruce V. Riley. A sinc-collocation method for the computation of the eigenvalues of the radial Schrödinger equation. *IMA Journal of Numerical Analysis*, 4(1):83–98, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lyche:1988:DRS

- [1606] T. Lyche and K. Mørken. A data-reduction strategy for splines with applications to the approximation of functions and data. *IMA Journal of Numerical Analysis*, 8(2):185–208, 1988.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Lyness:1989:ILR

- [1607] J. N. Lyness. An introduction to lattice rules and their generator matrices. *IMA Journal of Numerical Analysis*, 9(3):405–419, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ma:2018:EEC

- [1608] Chupeng Ma, Liqun Cao, and Yanping Lin. Error estimates of Crank–Nicolson Galerkin method for the time-dependent Maxwell–Schrödinger equations under the Lorentz gauge. *IMA Journal of Numerical Analysis*, 38(4):2074–2104, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2074/4321721>.

Ma:2022:AGF

- [1609] Chupeng Ma, Yongwei Zhang, and Liqun Cao. Analysis of a Galerkin finite element method for the Maxwell–Schrödinger system under temporal gauge. *IMA Journal of Numerical Analysis*, 42(4):3609–3631, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3609/6411794>.

Ma:1987:FPM

- [1610] He Ping Ma and Ben Yu Guo. The Fourier pseudospectral method for two-dimensional vorticity equations. *IMA Journal of Numerical Analysis*, 7(1):47–60, 1987. CODEN IJNADH. ISSN

0272-4979 (print), 1464-3642 (electronic).

Ma:2006:PEE

- [1611] Jingtang Ma and Hermann Brunner. A posteriori error estimates of discontinuous Galerkin methods for non-standard Volterra integro-differential equations. *IMA Journal of Numerical Analysis*, 26(1):78–95, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/78>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/78>.

Ma:2017:UMN

- [1612] K. Ma and P. A. Forsyth. An unconditionally monotone numerical scheme for the two-factor uncertain volatility model. *IMA Journal of Numerical Analysis*, 37(2):905–944, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/905/2669987>/
An-unconditionally-monotone-numerical-scheme-for.

Ma:2018:WEA

- [1613] Lina Ma, Jie Shen, Li-Lian Wang, and Zhiguo Yang. Wavenumber explicit analysis for time-harmonic Maxwell equations in a spherical shell and spectral approximations. *IMA Journal of Numerical Analysis*, 38(2):810–851, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/810/3844800>.

Mackenzie:2011:ASC

- [1614] J. A. Mackenzie and A. Madzvamuse. Analysis of stability and convergence of finite-difference methods for a reaction–diffusion problem on a one-dimensional growing domain. *IMA Journal of Numerical Analysis*, 31(1):212–232, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/212.full.pdf+html>.

Mackenzie:2007:ASC

- [1615] J. A. Mackenzie and W. R. Mekwi. An analysis of stability and convergence of a finite-difference discretization of a model parabolic PDE in 1D using a moving mesh. *IMA Journal of Numerical Analysis*, 27(3):507–528, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/507>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/507>.

Mackenzie:2012:USS

- [1616] J. A. Mackenzie and W. R. Mekwi. An unconditionally stable second-order accurate ale-fem scheme for two-dimensional convection-diffusion problems. *IMA Journal of Numerical Analysis*, 32(3):888–905, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/888.full.pdf+html>.

Mackenzie:1999:UCA

- [1617] John Mackenzie. Uniform convergence analysis of an upwind finite-difference approximation of a convection-diffusion boundary value problem on an adaptive grid. *IMA Journal of Numerical Analysis*, 19(2):233–249, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190233.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190233.pdf.

Madden:2003:UCN

- [1618] Journal Niall Madden and Martin Stynes. A uniformly convergent numerical method for a coupled system of two singularly perturbed linear reaction-diffusion problems. *IMA Journal of Numerical Analysis*, 23(4):627–644, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230627.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230627.pdf.

Maes:2006:HBP

- [1619] Jan Maes and Adhemar Bultheel. A hierarchical basis preconditioner for the biharmonic equation on the sphere. *IMA Journal of Numerical Analysis*, 26(3):563–583, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/563>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/563>.

Maeztu:1989:SCF

- [1620] J. I. Maeztu. On symmetric cubature formulae for planar regions. *IMA Journal of Numerical Analysis*, 9(2):167–183, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Mahata:2023:NDE

- [1621] Shantiram Mahata and Rajen Kumar Sinha. Nonsmooth data error estimates of the L1 scheme for subdiffusion equations with positive-type memory term. *IMA Journal of Numerical Analysis*, 43(3):1742–1778, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1742/6643288>.

Maier:2023:EAF

- [1622] Bernhard Maier. Error analysis for full discretizations of quasilinear wave-type equations with two variants of the implicit midpoint rule. *IMA Journal of Numerical Analysis*, 43(2):1149–1180, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/1149/6590236>.

Maierhofer:2023:RMC

- [1623] G. Maierhofer, A. Iserles, and N. Peake. Recursive moment computation in Filon methods and application to high-frequency wave scattering in two dimensions. *IMA Journal of Numerical Analysis*, 43(6):3169–3211, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3169/6643288>.

academic.oup.com/imajna/article/43/6/3169/6795915.

Maire:2006:MCM

- [1624] Sylvain Maire and Denis Talay. On a Monte Carlo method for neutron transport criticality computations. *IMA Journal of Numerical Analysis*, 26(4):657–685, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/657>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/657>.

Maity:2021:DFG

- [1625] Ruma Rani Maity, Apala Majumdar, and Neela Nataraj. Discontinuous Galerkin finite element methods for the Landau–de Gennes minimization problem of liquid crystals. *IMA Journal of Numerical Analysis*, 41(2):1130–1163, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1130/5858217>.

Majee:2022:EPE

- [1626] Ananta K. Majee and Andreas Prohl. *A posteriori* error estimation and space-time adaptivity for a linear stochastic PDE with additive noise. *IMA Journal of Numerical Analysis*, 42(2):1526–1567, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1526/6180121>.

Makrelov:1985:CTM

- [1627] I. Makrelov and Kh. Semerdzhiev. On the convergence of two methods for the simultaneous finding of all roots of exponential equations. *IMA Journal of Numerical Analysis*, 5(2):191–200, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Makridakis:1995:HOF

- [1628] Charalambos G. Makridakis. High-order fully discrete methods for the equations of elastic wave propagation with absorbing boundary conditions. *IMA Journal of Numerical Analysis*, 15(3):377–404, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Makroglou:1982:HMN

- [1629] A. Makroglou. Hybrid methods in the numerical solution of Volterra integro-differential equations. *IMA Journal of Numerical Analysis*, 2(1):21–35, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See errata [1630].

Makroglou:1983:EHM

- [1630] A. Makroglou. Errata: “Hybrid methods in the numerical solution of Volterra integro-differential equations” [IMA J. Numer. Anal. **2** (1982), no. 1, 21–35; MR 83d:65352]. *IMA Journal of Numerical Analysis*, 3(3):381–382, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See [1629].

Malajovich:2023:CSP

- [1631] Gregorio Malajovich. Complexity of sparse polynomial solving 2: renormalization. *IMA Journal of Numerical*

Analysis, 43(4):2001–2114, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2001/6712216>.

Malek:1995:PCM

- [1632] Alaeddin Malek and Timothy N. Phillips. Pseudospectral collocation methods for fourth-order differential equations. *IMA Journal of Numerical Analysis*, 15(4):523–553, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Malkmus:2018:GSM

- [1633] T. Malkmus, M. Ruzicka, S. Eckstein, and I. Touloupoulos. Generalizations of SIP methods to systems with p -structure. *IMA Journal of Numerical Analysis*, 38(3):1420–1451, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1420/4108120>.

Maltese:2021:IMS

- [1634] David Maltese and Antonín Novotný. Implicit MAC scheme for compressible Navier–Stokes equations: low Mach asymptotic error estimates. *IMA Journal of Numerical Analysis*, 41(1):122–163, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/122/5824923>.

Manh:2021:HIU

- [1635] Phung Van Manh. Hermite interpolation on the unit sphere and limits of Lagrange projectors. *IMA*

Journal of Numerical Analysis, 41(2):1441–1464, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imanum/article/41/2/1441/5837336>.

Manneback:1985:MAG

- [1636] P. E. Manneback, Ch. Murigande, and Ph. L. Toint. A modification of an algorithm by Golub and Plemmons for large linear least squares in the context of Doppler positioning. *IMA Journal of Numerical Analysis*, 5(2):221–233, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Mannel:2023:CBM

- [1637] Florian Mannel. On the convergence of Broyden’s method and some accelerated schemes for singular problems. *IMA Journal of Numerical Analysis*, 43(1):414–442, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imanum/article/43/1/414/6503972>.

Manni:1997:MIO

- [1638] Carla Manni and Paul Sablonnière. Monotone interpolation of order 3 by C^2 cubic splines. *IMA Journal of Numerical Analysis*, 17(2):305–320, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170305.sgm.abs.html.

Mannikko:1994:RMI

- [1639] T. Männikkö, P. Neittaanmäki, and D. Tiba. A rapid method for the identification of the free boundary in two-phase Stefan problems. *IMA Journal*

of Numerical Analysis, 14(3):411–420, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Manoranjan:1993:SET

- [1640] V. S. Manoranjan and R. Drake. A spectrum enveloping technique for convection-diffusion computations. *IMA Journal of Numerical Analysis*, 13(3):431–443, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Manouzi:2001:MFE

- [1641] H. Manouzi and M. Farhloul. Mixed finite element analysis of a non-linear three-fields Stokes model. *IMA Journal of Numerical Analysis*, 21(1):143–164, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210143abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210143.pdf.

Manouzi:2004:MFE

- [1642] Hassan Manouzi and Thomas Gorm Theting. Mixed finite element approximation for the stochastic pressure equation of Wick type. *IMA Journal of Numerical Analysis*, 24(4):605–634, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/605>; <http://imanum.oupjournals.org/cgi/reprint/24/4/605>.

Marazzina:2008:SPD

- [1643] Daniele Marazzina. Stability properties of discontinuous Galerkin methods

- for 2D elliptic problems. *IMA Journal of Numerical Analysis*, 28(3):552–579, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/552>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/552>.
- Marin:2014:CTR**
- [1644] Oana Marin, Olof Runborg, and Anna-Karin Tornberg. Corrected trapezoidal rules for a class of singular functions. *IMA Journal of Numerical Analysis*, 34(4):1509–1540, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1509>.
- Marinov:1986:TEI**
- [1645] Corneliu Marinov. Truncation errors for infinite linear systems. *IMA Journal of Numerical Analysis*, 6(1):51–63, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Markham:1990:CGT**
- [1646] G. Markham. Conjugate gradient type methods for indefinite, asymmetric, and complex systems. *IMA Journal of Numerical Analysis*, 10(2):155–170, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Marletta:2010:NDM**
- [1647] Marco Marletta. Neumann–Dirichlet maps and analysis of spectral pollution for non-self-adjoint elliptic PDEs with real essential spectrum. *IMA Journal of Numerical Analysis*, 30(4):917–939, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/917.full.pdf+html>.
- Marquez:2015:SCF**
- [1648] Antonio Márquez, Salim Meddahi, and Francisco-Javier Sayas. Strong coupling of finite element methods for the Stokes–Darcy problem. *IMA Journal of Numerical Analysis*, 35(2):969–988, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/969>.
- Marsden:1984:CSI**
- [1649] M. J. Marsden. Cubic X -spline interpolants. *IMA Journal of Numerical Analysis*, 4(2):203–207, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Martins:1995:EBM**
- [1650] M. Madalena Martins and M. Estela Trigo. An error bound for the modified successive overrelaxation method. *IMA Journal of Numerical Analysis*, 15(4):461–473, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Maset:2013:SPE**
- [1651] S. Maset and M. Zennaro. Stability properties of explicit exponential Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 33(1):111–135, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/111.full.pdf+html>.

Mason:1981:NMI

- [1652] J. C. Mason. Near-minimax interpolation by a polynomial in z and z^{-1} on a circular annulus. *IMA Journal of Numerical Analysis*, 1(3):359–367, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Mason:1983:NBA

- [1653] J. C. Mason. Near-best L_p approximations by real and complex Chebyshev series. *IMA Journal of Numerical Analysis*, 3(4):493–504, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Mason:1984:NBA

- [1654] J. C. Mason and B. L. Chalmers. Near-best L_p approximations by Fourier, Taylor and Laurent series. *IMA Journal of Numerical Analysis*, 4(1):1–8, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Massei:2024:NDC

- [1655] Stefano Massei and Leonardo Robol. A nested divide-and-conquer method for tensor Sylvester equations with positive definite hierarchically semiseparable coefficients. *IMA Journal of Numerical Analysis*, 44(6):3482–3519, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3482/7459761>.

Mastroianni:1994:NIB

- [1656] G. Mastroianni and G. Monegato. Nyström interpolants based on the zeros of Legendre polynomials for a

noncompact integral operator equation. *IMA Journal of Numerical Analysis*, 14(1):81–95, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Mastroianni:1997:NIB

- [1657] G. Mastroianni and G. Monegato. Nyström interpolants based on zeros of Laguerre polynomials for some Weiner-Hopf equations. *IMA Journal of Numerical Analysis*, 17(4):621–642, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170621.sgm.abs.html.

Mastroianni:2009:SNM

- [1658] Giuseppe Mastroianni and Gradimir V. Milovanovic. Some numerical methods for second-kind Fredholm integral equations on the real semi-axis. *IMA Journal of Numerical Analysis*, 29(4):1046–1066, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/1046>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/1046>.

Mastroianni:2014:GQR

- [1659] Giuseppe Mastroianni, Incoronata Notarangelo, and Gradimir V. Milovanović. Gaussian quadrature rules with an exponential weight on the real semi-axis. *IMA Journal of Numerical Analysis*, 34(4):1654–1685, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/34/4/1654>.

oxfordjournals.org/content/34/4/1654.

Mastronardi:2015:SBS

- [1660] Nicola Mastronardi and Paul Van Dooren. A structurally backward stable algorithm for solving the indefinite least squares problem with equality constraints. *IMA Journal of Numerical Analysis*, 35(1):107–132, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/107>.

Mastronardi:2021:QSP

- [1661] Nicola Mastronardi and Paul Van Dooren. On QZ steps with perfect shifts and computing the index of a differential–algebraic equation. *IMA Journal of Numerical Analysis*, 41(4):2516–2529, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2516/5892042>.

Matos:1990:CAM

- [1662] Ana C. Matos. A convergence acceleration method based on a good estimation of the absolute value of the error. *IMA Journal of Numerical Analysis*, 10(2):243–251, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Matos:2000:LDO

- [1663] Ana C. Matos. Linear difference operators and acceleration methods. *IMA Journal of Numerical Analysis*, 20(3):359–388, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200359.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200359.pdf.

oup.co.uk/imanum/hdb/Volume_20/Issue_03/200359.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200359.pdf.

Mattar:2023:PTM

- [1664] Wael Mattar and Nir Sharon. Pyramid transform of manifold data via subdivision operators. *IMA Journal of Numerical Analysis*, 43(1):387–413, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/387/6469200>.

Mattheij:1992:DBS

- [1665] R. M. M. Mattheij. Decoupling of bidiagonal systems involving singular blocks. *IMA Journal of Numerical Analysis*, 12(2):301–317, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Matthies:2015:LPT

- [1666] Gunar Matthies and Lutz Tobiska. Local projection type stabilization applied to inf-sup stable discretizations of the Oseen problem. *IMA Journal of Numerical Analysis*, 35(1):239–269, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/239>.

Mazya:1996:AAU

- [1667] Vladimir Maz’ya and Gunther Schmidt. On approximate approximations using Gaussian kernels. *IMA Journal of Numerical Analysis*, 16(1):13–29, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-

3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160013.sgm.abs.html.

McKee:1983:DMB

- [1668] S. McKee. Discretization methods and block isoclinal matrices. *IMA Journal of Numerical Analysis*, 3(4):467–491, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

McKee:2000:ETM

- [1669] Sean McKee, Tao Tang, and Teresa Diogo. An Euler-type method for two-dimensional Volterra integral equations of the first kind. *IMA Journal of Numerical Analysis*, 20(3):423–440, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200423.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200423.pdf.

McLachlan:2003:SDP

- [1670] Journal Robert I. McLachlan. Spatial discretization of partial differential equations with integrals. *IMA Journal of Numerical Analysis*, 23(4):645–664, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230645.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230645.pdf.

McLachlan:2015:CLP

- [1671] Robert I. McLachlan, Klas Modin, and Olivier Verdier. Collective Lie-Poisson integrators on R^3 . *IMA Journal of Numerical Analysis*, 35(2):546–

560, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/546>.

McLean:1989:AAE

- [1672] W. McLean. Asymptotic error expansions for numerical solutions of integral equations. *IMA Journal of Numerical Analysis*, 9(3):373–384, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

McLean:1994:FDS

- [1673] W. McLean and I. H. Sloan. A fully discrete and symmetric boundary element method. *IMA Journal of Numerical Analysis*, 14(3):311–345, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

McLean:2004:TDE

- [1674] William McLean and Vidar Thomée. Time discretization of an evolution equation via Laplace transforms. *IMA Journal of Numerical Analysis*, 24(3):439–463, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240439.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240439.pdf.

McLean:2010:MNE

- [1675] William McLean and Vidar Thomée. Maximum-norm error analysis of a numerical solution via Laplace transformation and quadrature of a fractional-order evolution equation. *IMA Journal of Numerical Analysis*, 30(1):208–230, January 2010. CODEN IJNADH.

- ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/208>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/208>.
- Meek:1982:TST**
- [1679] P. C. Meek and J. Norbury. Two-stage, two-level finite difference schemes for nonlinear parabolic equations. *IMA Journal of Numerical Analysis*, 2(3):335–356, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- McLeod:1982:GDD**
- [1676] R. J. Y. McLeod and J. M. Sanz-Serna. Geometrically derived difference formulae for the numerical integration of trajectory problems. *IMA Journal of Numerical Analysis*, 2(3):357–370, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Meerbergen:2016:IRR**
- [1680] Karl Meerbergen. An implicitly restarted rational Krylov strategy for Lyapunov inverse iteration. *IMA Journal of Numerical Analysis*, 36(2):655–674, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/655>.
- Meddahi:1999:MDM**
- [1677] Salim Meddahi and Antonio Márquez. A multidomain discretization method with local mesh refinement. *IMA Journal of Numerical Analysis*, 19(2):251–271, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190251.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190251.pdf.
- Meerbergen:2017:CPA**
- [1681] Karl Meerbergen, Emre Mengi, Wim Michiels, and Roel Van Beeumen. Computation of pseudospectral abscissa for large-scale nonlinear eigenvalue problems. *IMA Journal of Numerical Analysis*, 37(4):1831–1863, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1831/2894467>. See erratum [1682].
- Meerbergen:2015:FEA**
- [1678] Salim Meddahi, David Mora, and Rodolfo Rodríguez. A finite element analysis of a pseudostress formulation for the Stokes eigenvalue problem. *IMA Journal of Numerical Analysis*, 35(2):749–766, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/749>.
- Meerbergen:2018:ECP**
- [1682] Karl Meerbergen, Emre Mengi, Wim Michiels, and Roel Van Beeumen. Erratum to: “Computation of pseudospectral abscissa for large-scale nonlinear eigenvalue problems”. *IMA Journal of Numerical Analysis*, 38(3):1598, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1598/4769650>. See [1681].

Meerbergen:1996:MTC

- [1683] Karl Meerbergen and Dirk Roose. Matrix transformations for computing rightmost eigenvalues of large sparse non-symmetric eigenvalue problems. *IMA Journal of Numerical Analysis*, 16(3):297–346, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160297.sgm.abs.html.

Melenk:2014:QOP

- [1684] J. M. Melenk, H. Rezaïjafari, and B. Wohlmuth. Quasi-optimal a priori estimates for fluxes in mixed finite element methods and an application to the Stokes–Darcy coupling. *IMA Journal of Numerical Analysis*, 34(1):1–27, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/1.full.pdf+html>.

Melenk:2013:REC

- [1685] J. M. Melenk, C. Xenophontos, and L. Oberbroeckling. Robust exponential convergence of hp FEM for singularly perturbed reaction-diffusion systems with multiple scales. *IMA Journal of Numerical Analysis*, 33(2):609–628, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/609.full.pdf+html>.

Melenk:1997:REC

- [1686] Jens Markus Melenk. On the robust exponential convergence of hp finite element methods for problems with boundary layers. *IMA Journal of Numerical Analysis*, 17(4):577–601, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170577.sgm.abs.html.

Melenk:2021:HFF

- [1687] Jens Markus Melenk and Alexander Rieder. hp-FEM for the fractional heat equation. *IMA Journal of Numerical Analysis*, 41(1):412–454, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/412/5771305>.

Melenk:2023:ECD

- [1688] Jens Markus Melenk and Alexander Rieder. An exponentially convergent discretization for space-time fractional parabolic equations using hp-FEM. *IMA Journal of Numerical Analysis*, 43(4):2352–2376, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2352/6759787>.

Melenk:1999:FEM

- [1689] Jens Markus Melenk and Christoph Schwab. An hp finite element method for convection-diffusion problems in one dimension. *IMA Journal of Numerical Analysis*, 19(3):425–453, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190453.sgm.abs.html.

- oup.co.uk/imanum/hdb/Volume_19/Issue_03/190425.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190425.pdf.
- Mengi:2005:ACP**
- [1693] Emre Mengi and Michael L. Overton. Algorithms for the computation of the pseudospectral radius and the numerical radius of a matrix. *IMA Journal of Numerical Analysis*, 25(4):648–669, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/648>.
- Meng:2023:MVE**
- [1690] Jian Meng, Gang Wang, and Liquan Mei. Mixed virtual element method for the Helmholtz transmission eigenvalue problem on polytopal meshes. *IMA Journal of Numerical Analysis*, 43(3):1685–1717, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1685/6590237>.
- Messaoudi:1995:SPR**
- [1694] A. Messaoudi. Some properties of the recursive projection and interpolation algorithms. *IMA Journal of Numerical Analysis*, 15(3):307–318, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Meng:2018:DDE**
- [1691] Xiong Meng and Jennifer K. Ryan. Divided difference estimates and accuracy enhancement of discontinuous Galerkin methods for nonlinear symmetric systems of hyperbolic conservation laws. *IMA Journal of Numerical Analysis*, 38(1):125–155, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/125/3038023>.
- Metzger:2022:CFE**
- [1695] Stefan Metzger. A convergent finite element scheme for a fourth-order liquid crystal model. *IMA Journal of Numerical Analysis*, 42(1):440–486, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/440/5934906>.
- Meng:2012:SLD**
- [1692] Xiong Meng, Chi-Wang Shu, and Boying Wu. Superconvergence of the local discontinuous Galerkin method for linear fourth-order time-dependent problems in one space dimension. *IMA Journal of Numerical Analysis*, 32(4):1294–1328, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1294.full.pdf+html>.
- Metzger:2023:CSS**
- [1696] Stefan Metzger. A convergent SAV scheme for Cahn–Hilliard equations with dynamic boundary conditions. *IMA Journal of Numerical Analysis*, 43(6):3593–3627, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3593/6984971>.

Meyer:2020:PEA

- [1697] Fabian Meyer, Christian Rohde, and Jan Giesselmann. A posteriori error analysis for random scalar conservation laws using the stochastic Galerkin method. *IMA Journal of Numerical Analysis*, 40(2):1094–1121, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1094/5316650>.

Miao:2023:NSM

- [1698] Borui Miao, Giovanni Russo, and Zhenan Zhou. A novel spectral method for the semiclassical Schrödinger equation based on the Gaussian wavepacket transform. *IMA Journal of Numerical Analysis*, 43(2):1221–1261, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/1221/6575863>. See correction [111].

Micheletti:2008:UBA

- [1699] Stefano Micheletti, Simona Perotto, and Marco Verani. Uzawa-based adaptive methods for linear output functionals. *IMA Journal of Numerical Analysis*, 28(3):619–646, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/619>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/619>.

Mickel:2023:WCO

- [1700] Annalena Mickel and Andreas Neuenkirch. The weak convergence order of two

Euler-type discretization schemes for the log-Heston model. *IMA Journal of Numerical Analysis*, 43(6):3326–3356, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3326/6834122>.

Micula:2015:TCN

- [1701] Sanda Micula and Wolfgang L. Wendland. Trigonometric collocation for nonlinear Riemann–Hilbert problems on doubly connected domains. *IMA Journal of Numerical Analysis*, 35(2):834–858, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/834>.

Miellou:2005:SCF

- [1702] J. C. Miellou, P. Spiteri, and D. El Baz. Stopping criteria, forward and backward errors for perturbed asynchronous linear fixed point methods in finite precision. *IMA Journal of Numerical Analysis*, 25(3):429–442, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/429>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/429>.

Miettinen:1995:ANM

- [1703] Markku Miettinen and Jaroslav Haslinger. Approximation of non-monotone multivalued differential inclusions. *IMA Journal of Numerical Analysis*, 15(4):475–503, 1995.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Migliorati:2021:MAF

- [1704] Giovanni Migliorati. Multivariate approximation of functions on irregular domains by weighted least-squares methods. *IMA Journal of Numerical Analysis*, 41(2):1293–1317, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1293/5872671>.

Mihai:2006:ASB

- [1705] L. Angela Mihai and Alan W. Craig. Alternate strip-based substructuring algorithms for elliptic PDEs in two dimensions. *IMA Journal of Numerical Analysis*, 26(2):354–380, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/354>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/354>.

Mihai:2009:ASB

- [1706] L. Angela Mihai and Alan W. Craig. Alternate slice-based substructuring in three dimensions. *IMA Journal of Numerical Analysis*, 29(3):508–538, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/508>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/508>.

Miller:1995:PUM

- [1707] J. J. H. Miller, E. O’Riordan, and G. I. Shishkin. On piecewise-uniform meshes

for upwind- and central-difference operators for solving singularly perturbed problems. *IMA Journal of Numerical Analysis*, 15(1):89–99, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Miller:1994:NNP

- [1708] J. J. H. Miller and S. Wang. A new nonconforming Petrov–Galerkin finite-element method with triangular elements for a singularly perturbed advection-diffusion problem. *IMA Journal of Numerical Analysis*, 14(2):257–276, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Miller:2001:LSM

- [1709] Keith Miller and Mike J. Baines. Least squares moving finite elements. *IMA Journal of Numerical Analysis*, 21(3):621–642, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210621.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210621.pdf.

Milner:1996:MFE

- [1710] F. A. Milner and E.-J. Park. Mixed finite-element methods for Hamilton–Jacobi–Bellman-type equations. *IMA Journal of Numerical Analysis*, 16(3):399–412, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160399.sgm.abs.html.

Milovanovic:2011:GQR

- [1711] Gradimir V. Milovanović and Aleksandar S. Cvetković. Gaussian quadrature rules using function derivatives. *IMA Journal of Numerical Analysis*, 31(1):358–377, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/358.full.pdf+html>.

Milovanovic:2019:QMN

- [1712] Gradimir V. Milovanović, Ramón Orive, and Miodrag M. Spalević. Quadratures with multiple nodes for Fourier–Chebyshev coefficients. *IMA Journal of Numerical Analysis*, 39(1):271–296, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/271/4629556>.

Milovanovic:2009:EEG

- [1713] Gradimir V. Milovanovic, Miodrag M. Spalevic, and Miroslav S. Pranic. Error estimates for Gauss–Turán quadratures and their Kronrod extensions. *IMA Journal of Numerical Analysis*, 29(3):486–507, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/486>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/486>.

Milstein:2001:NSD

- [1714] G. N. Milstein and M. V. Tretyakov. Numerical solution of the Dirichlet problem for nonlinear parabolic equations by a probabilistic approach. *IMA*

Journal of Numerical Analysis, 21(4):887–917, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210887.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210887.pdf.

Milstein:2002:PAS

- [1715] G. N. Milstein and M. V. Tretyakov. A probabilistic approach to the solution of the Neumann problem for nonlinear parabolic equations. *IMA Journal of Numerical Analysis*, 22(4):599–622, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220599.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220599.pdf.

Milstein:2007:DFB

- [1716] G. N. Milstein and M. V. Tretyakov. Discretization of forward–backward stochastic differential equations and related quasi-linear parabolic equations. *IMA Journal of Numerical Analysis*, 27(1):24–44, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/24>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/24>.

Milstein:2003:QSM

- [1717] Journal G. N. Milstein and M. V. Tretyakov. Quasi-symplectic methods for Langevin-type equations. *IMA Journal of Numerical Analysis*, 23(4):

- 593–626, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230593.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230593.pdf.
- Mirzaei:2012:GML**
- [1718] Davoud Mirzaei, Robert Schaback, and Mehdi Dehghan. On generalized moving least squares and diffuse derivatives. *IMA Journal of Numerical Analysis*, 32(3):983–1000, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/983.full.pdf+html>.
- Mishra:2022:EGE**
- [1719] Siddhartha Mishra and Roberto Molinaro. Estimates on the generalization error of physics-informed neural networks for approximating a class of inverse problems for PDEs. *IMA Journal of Numerical Analysis*, 42(2):981–1022, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/981/6297946>.
- Mishra:2023:EGE**
- [1720] Siddhartha Mishra and Roberto Molinaro. Estimates on the generalization error of physics-informed neural networks for approximating PDEs. *IMA Journal of Numerical Analysis*, 43(1):1–43, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/1/6503953>.
- Mitchell:2016:HEC**
- [1721] Tim Mitchell and Michael L. Overton. Hybrid expansion-contraction: a robust scaleable method for approximating the H_∞ norm. *IMA Journal of Numerical Analysis*, 36(3):985–1014, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/985>.
- Mittal:1991:HOF**
- [1722] R. C. Mittal and S. Gahlaut. High-order finite-difference schemes to solve Poisson’s equation in polar coordinates. *IMA Journal of Numerical Analysis*, 11(2):261–270, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Mohr:2024:FOP**
- [1723] Stephan Mohr, Yuji Nakatsukasa, and Carolina Urzúa-Torres. Full operator preconditioning and the accuracy of solving linear systems. *IMA Journal of Numerical Analysis*, 44(6):3259–3279, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3259/7587505>.
- Mommer:2006:SPF**
- [1724] Mario S. Mommer. A smoothness preserving fictitious domain method for elliptic boundary-value problems. *IMA Journal of Numerical Analysis*, 26(3):503–524, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/503>; <http://comjnl.oup.com>.

oxfordjournals.org/cgi/reprint/
26/3/503.

Monegato:2023:E

- [1725] Giovanni Monegato. Erratum to: “On a time-discrete convolution-space collocation BEM for the numerical solution of two-dimensional wave propagation problems in unbounded domains”. *IMA Journal of Numerical Analysis*, 43(6):3796–3799, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3796/7147510>. See [1726].

Monegato:2023:TDC

- [1726] Giovanni Monegato. On a time-discrete convolution-space collocation BEM for the numerical solution of two-dimensional wave propagation problems in unbounded domains. *IMA Journal of Numerical Analysis*, 43(6):3766–3795, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3766/6795271>. See erratum [1725].

Monjezi:2023:PBA

- [1727] Najmeh Hoseini Monjezi, Soghra Nobakhtian, and Mohamad Reza Pouryayevali. A proximal bundle algorithm for nonsmooth optimization on Riemannian manifolds. *IMA Journal of Numerical Analysis*, 43(1):293–325, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/293/6454153>.

Monk:2022:HMS

- [1728] Peter Monk and Yangwen Zhang. An HDG method for the Steklov eigenvalue problem. *IMA Journal of Numerical Analysis*, 42(3):1929–1962, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/1929/6254232>.

Moore:1981:COA

- [1729] G. Moore and A. Spence. The convergence of operator approximations at turning points. *IMA Journal of Numerical Analysis*, 1(1):23–38, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Moore:1986:OAS

- [1730] G. Moore, A. Spence, and B. Werner. Operator approximation and symmetry-breaking bifurcation. *IMA Journal of Numerical Analysis*, 6(3):331–336, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Moore:1995:CPP

- [1731] Gerald Moore. Computation and parametrization of periodic and connecting orbits. *IMA Journal of Numerical Analysis*, 15(2):245–263, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Moore:1999:ACS

- [1732] Gerald Moore and Evelyne Hubert. Algorithms for constructing stable manifolds of stationary solutions. *IMA Journal of Numerical Analysis*, 19(3):375–424, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://www3>.

oup.co.uk/imanum/hdb/Volume_19/Issue_03/190375.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190375.pdf.

Moosmuller:2019:ISV

- [1733] Caroline Moosmüller and Nira Dyn. Increasing the smoothness of vector and Hermite subdivision schemes. *IMA Journal of Numerical Analysis*, 39(2):579–606, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/579/4955793>.

Moosmuller:2021:SNG

- [1734] Caroline Moosmüller, Svenja Hüning, and Costanza Conti. Stirling numbers and Gregory coefficients for the factorization of Hermite subdivision operators. *IMA Journal of Numerical Analysis*, 41(4):2936–2961, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2936/5898149>.

Mora:2005:WES

- [1735] Carlos M. Mora. Weak exponential schemes for stochastic differential equations with additive noise. *IMA Journal of Numerical Analysis*, 25(3):486–506, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/486>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/486>.

Mora:2022:VEM

- [1736] David Mora, Carlos Reales, and Alberth Silgado. A C^1 -virtual element

method of high order for the Brinkman equations in stream function formulation with pressure recovery. *IMA Journal of Numerical Analysis*, 42(4):3632–3674, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3632/6479810>.

Mora:2020:PPE

- [1737] David Mora and Gonzalo Rivera. A priori and a posteriori error estimates for a virtual element spectral analysis for the elasticity equations. *IMA Journal of Numerical Analysis*, 40(1):322–357, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/322/5148143>.

Morales:2012:SQP

- [1738] José Luis Morales, Jorge Nocedal, and Yuchen Wu. A sequential quadratic programming algorithm with an additional equality constrained phase. *IMA Journal of Numerical Analysis*, 32(2):553–579, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/553.full.pdf+html>.

Moret:1990:PNM

- [1739] Igor Moret and Pierpaolo Omari. A projective Newton method for semi-linear operator equations in Banach spaces. *IMA Journal of Numerical Analysis*, 10(4):505–520, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Morton:1981:E

- [1740] K. W. Morton and M. J. D. Powell. Editorial. *IMA Journal of Numerical Analysis*, 1(1):1, January 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Morton:1993:DCD

- [1741] K. W. Morton and I. J. Sobey. Discretization of a convection-diffusion equation. *IMA Journal of Numerical Analysis*, 13(1):141–160, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Morton:1991:FVM

- [1742] K. W. Morton and E. Süli. Finite volume methods and their analysis. *IMA Journal of Numerical Analysis*, 11(2):241–260, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Morton:2010:CDP

- [1743] K. William Morton. The convection–diffusion Petrov–Galerkin story. *IMA Journal of Numerical Analysis*, 30(1):231–240, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/231>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/231>.

Motte:1988:NCM

- [1744] David L. Motte. The numerical computation of the minimal projection. *IMA Journal of Numerical Analysis*, 8(2):219–230, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Mu:2015:NWG

- [1745] Lin Mu, Junping Wang, and Xiu Ye. A new weak Galerkin finite element method for the Helmholtz equation. *IMA Journal of Numerical Analysis*, 35(3):1228–1255, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1228>.

Muhr:2023:DGC

- [1746] Markus Muhr, Barbara Wohlmuth, and Vanja Nikolić. A discontinuous Galerkin coupling for nonlinear elastoacoustics. *IMA Journal of Numerical Analysis*, 43(1):225–257, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/225/6437769>.

Mulansky:1992:CAS

- [1747] Bernd Mulansky. Chebyshev approximation by spline functions with free knots. *IMA Journal of Numerical Analysis*, 12(1):95–105, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Mullenheim:1992:STP

- [1748] Gregor Müllenheim. Solving two-point boundary value problems with spline functions. *IMA Journal of Numerical Analysis*, 12(4):503–518, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Muller-Gronbach:2022:SOM

- [1749] Thomas Müller-Gronbach and Larisa Yaroslavtseva. A strong order

3/4 method for SDEs with discontinuous drift coefficient. *IMA Journal of Numerical Analysis*, 42(1):229–259, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/229/5989805>.

Murdoch:1992:CSS

- [1750] T. Murdoch and C. J. Budd. Convergent and spurious solutions of nonlinear elliptic equations. *IMA Journal of Numerical Analysis*, 12(3):365–386, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

Mustapha:2011:IFD

- [1751] Kassem Mustapha. An implicit finite-difference time-stepping method for a sub-diffusion equation, with spatial discretization by finite elements. *IMA Journal of Numerical Analysis*, 31(2):719–739, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/719.full.pdf+html>.

Mustapha:2023:SOA

- [1752] Kassem Mustapha, Omar M. Knio, and Olivier P. Le Maître. A second-order accurate numerical scheme for a time-fractional Fokker–Planck equation. *IMA Journal of Numerical Analysis*, 43(4):2115–2136, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2115/6644914>.

Mustapha:2012:UCD

- [1753] Kassem Mustapha and William McLean. Uniform convergence for a discontinuous Galerkin, time-stepping method applied to a fractional diffusion equation. *IMA Journal of Numerical Analysis*, 32(3):906–925, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/906.full.pdf+html>.

Mustapha:2010:SOA

- [1754] Kassem Mustapha and Hussein Mustapha. A second-order accurate numerical method for a semilinear integro-differential equation with a weakly singular kernel. *IMA Journal of Numerical Analysis*, 30(2):555–578, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/555>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/555>.

Mustapha:2014:WPV

- [1755] Kassem Mustapha and Dominik Schötzau. Well-posedness of hp -version discontinuous Galerkin methods for fractional diffusion wave equations. *IMA Journal of Numerical Analysis*, 34(4):1426–1446, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1426>.

Nabet:2016:CFV

- [1756] Flore Nabet. Convergence of a

finite-volume scheme for the Cahn–Hilliard equation with dynamic boundary conditions. *IMA Journal of Numerical Analysis*, 36(4):1898–1942, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1898>.

Natale:2018:CVF

- [1757] Andrea Natale and Colin J. Cotter. Corrigendum to: A variational $\mathbf{H}(\text{div})$ finite-element discretization approach for perfect incompressible fluids. *IMA Journal of Numerical Analysis*, 38(2):1084, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/1084/4774535>. See [1758].

Natale:2018:VFE

- [1758] Andrea Natale and Colin J. Cotter. A variational $\mathbf{H}(\text{div})$ finite-element discretization approach for perfect incompressible fluids. *IMA Journal of Numerical Analysis*, 38(3):1388–1419, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1388/3897379>. See corrigendum [1757].

Navarrete:2016:ASI

- [1759] Raymundo Navarrete and Divakar Viswanath. Accuracy and stability of inversion of power series. *IMA Journal of Numerical Analysis*, 36(1):421–436, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/421>.

[oxfordjournals.org/content/36/1/421](http://imajna.oxfordjournals.org/content/36/1/421).

Navot:1987:EMT

- [1760] I. Navot. An Euler–Maclaurin transformation of a slowly convergent series with an application to Fourier coefficient evaluation. *IMA Journal of Numerical Analysis*, 7(3):335–353, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Necoara:2021:RSD

- [1761] Ion Necoara and Martin Takáč. Randomized sketch descent methods for non-separable linearly constrained optimization. *IMA Journal of Numerical Analysis*, 41(2):1056–1092, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1056/5834388>.

Negyesi:2024:OSM

- [1762] Balint Negyesi, Kristoffer Andersson, and Cornelis W Oosterlee. The One Step Malliavin scheme: new discretization of BSDEs implemented with deep learning regressions. *IMA Journal of Numerical Analysis*, 44(6):3595–3647, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3595/7613646>.

Neilan:2024:EFE

- [1763] Michael Neilan and Maxim Olshanskii. An Eulerian finite element method for the linearized Navier–Stokes problem in an evolving domain. *IMA Journal of Numerical Analysis*, 44(6):3234–3258, November 2024. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3234/7590885>.

Neuenkirch:2021:EMS

- [1764] Andreas Neuenkirch and Michaela Szölgényi. The Euler–Maruyama scheme for SDEs with irregular drift: convergence rates via reduction to a quadrature problem. *IMA Journal of Numerical Analysis*, 41(2):1164–1196, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1164/5858186>.

Neuman:1983:PCP

- [1765] Edward Neuman. Properties of a class of polynomial splines. *IMA Journal of Numerical Analysis*, 3(2):245–252, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ng:1999:FIM

- [1766] Michael K. Ng. Fast iterative methods for symmetric sinc-Galerkin systems. *IMA Journal of Numerical Analysis*, 19(3):357–373, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190357.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190357.pdf.

Ngo:2017:EMA

- [1767] Hoang-Long Ngo and Dai Taguchi. On the Euler–Maruyama approximation for one-dimensional stochastic differential equations with irregular coefficients. *IMA Journal*

of Numerical Analysis, 37(4):1864–1883, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1864/3074990>.

Nguyen:2003:FEW

- [1768] Hoang Nguyen and Rob Stevenson. Finite-element wavelets on manifolds. *IMA Journal of Numerical Analysis*, 23(1):149–173, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230149.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230149.pdf.

Nguyen:2012:PCR

- [1769] Son Luu Nguyen and G. Yin. Pathwise convergence rate for numerical solutions of stochastic differential equations. *IMA Journal of Numerical Analysis*, 32(2):701–723, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/701.full.pdf+html>.

Nicaise:2005:CAF

- [1770] Serge Nicaise and Karim Djadel. Convergence analysis of a finite volume method for the Stokes system using non-conforming arguments. *IMA Journal of Numerical Analysis*, 25(3):523–548, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/523>; http://imanum.oup.com/imanum/hdb/Volume_25/Issue_03/2503523.sgm.abs.html; http://imanum.oup.com/imanum/hdb/Volume_25/Issue_03/pdf/2503523.pdf.

oxfordjournals.org/cgi/reprint/
25/3/523.

Nicaise:2008:PEE

- [1771] Serge Nicaise, Katharina Witowski, and Barbara I. Wohlmuth. An a posteriori error estimator for the Lamé equation based on equilibrated fluxes. *IMA Journal of Numerical Analysis*, 28(2):331–353, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/331>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/331>.

Nie:1985:LMF

- [1772] Yi Yong Nie and Vidar Thomée. A lumped mass finite-element method with quadrature for a nonlinear parabolic problem. *IMA Journal of Numerical Analysis*, 5(4):371–396, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Nielsen:2009:PIL

- [1773] Bjørn Fredrik Nielsen, Aslak Tveito, and Wolfgang Hackbusch. Preconditioning by inverting the Laplacian: an analysis of the eigenvalues. *IMA Journal of Numerical Analysis*, 29(1):24–42, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Nigam:2012:HOC

- [1774] Nilima Nigam and Joel Phillips. High-order conforming finite elements on pyramids. *IMA Journal of Numerical Analysis*, 32(2):448–483, April 2012. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/448.full.pdf+html>.

Nochetto:2019:TSM

- [1775] R. H. Nochetto, D. Ntogkas, and W. Zhang. Two-scale method for the Monge–Ampère equation: pointwise error estimates. *IMA Journal of Numerical Analysis*, 39(3):1085–1109, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1085/4992684>.

Nochetto:2009:SDW

- [1776] Ricardo H. Nochetto, Andreas Veiser, and Marco Verani. A safeguarded dual weighted residual method. *IMA Journal of Numerical Analysis*, 29(1):126–140, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Norton:2012:FEA

- [1777] Richard A. Norton and Endre Süli. Finite element approximation of an H^1 gradient flow of a double-well potential with bending energy. *IMA Journal of Numerical Analysis*, 32(4):1635–1661, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1635.full.pdf+html>.

Nurnberger:1998:EAI

- [1778] G. Nürnberger and G. Walz. Error analysis in interpolation by bivariate C_1 -splines. *IMA Journal of Numerical Analysis*, 18(4):485–508,

- October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180485.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180485.pdf.
- Ober-Blobaum:2017:GVI**
- [1779] Sina Ober-Blöbaum. Galerkin variational integrators and modified symplectic Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 37(1):375–406, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/375/2884280/Galerkin-variational-integrators-and-modified>.
- Oberman:2018:NMM**
- [1780] Adam M. Oberman and Tiago Salvador. Numerical methods for motion of level sets by affine curvature. *IMA Journal of Numerical Analysis*, 38(4):1735–1767, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1735/4085563>.
- Of:2006:FMM**
- [1781] G. Of, O. Steinbach, and W. L. Wendland. The fast multipole method for the symmetric boundary integral formulation. *IMA Journal of Numerical Analysis*, 26(2):272–296, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/272>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/272>.
- Oh:2014:NAA**
- [1782] Minah Oh. A new approach to the analysis of axisymmetric problems. *IMA Journal of Numerical Analysis*, 34(4):1686–1700, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1686>.
- Oh:2021:HLA**
- [1783] Minah Oh. The Hodge Laplacian on axisymmetric domains and its discretization. *IMA Journal of Numerical Analysis*, 41(2):1569–1607, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1569/5875524>.
- Ohlberger:2002:AFV**
- [1784] Mario Ohlberger and Christian Rohde. Adaptive finite volume approximations for weakly coupled convection dominated parabolic systems. *IMA Journal of Numerical Analysis*, 22(2):253–280, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220253.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220253.pdf.
- Oki:2023:ISM**
- [1785] Taihei Oki. Improved structural methods for nonlinear differential-algebraic equations via combinatorial relaxation. *IMA Journal of Numerical Analysis*, 43

- (1):357–386, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/357/6470741>.
- Oliver:1983:EBA**
- [1786] J. Oliver. The accurate evaluation of polynomial approximations to library functions. *IMA Journal of Numerical Analysis*, 2(1):63–72, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Oliver:1982:AEP**
- [1787] P. Oliver. A family of linear multi-step methods for the solution of stiff and nonstiff ODEs. *IMA Journal of Numerical Analysis*, 2(3):289–301, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Oliver:1982:FLM**
- [1788] Maxim A. Olshanskii, Arnold Reusken, and Xianmin Xu. A stabilized finite element method for advection-diffusion equations on surfaces. *IMA Journal of Numerical Analysis*, 34(2):732–758, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/732.full.pdf+html>.
- Olshanskii:2014:SFE**
- [1789] F. W. J. Olver. Further developments of *rp* and *ap* error analysis. *IMA Journal of Numerical Analysis*, 2(3):249–274, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Olver:1982:FDE**
- [1790] F. W. J. Olver. Error bounds for arithmetic operations on computers without guard digits. *IMA Journal of Numerical Analysis*, 3(2):153–160, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Olver:1986:EBP**
- [1791] F. W. J. Olver. Error bounds for polynomial evaluation and complex arithmetic. *IMA Journal of Numerical Analysis*, 6(3):373–379, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Olver:1982:PEB**
- [1792] F. W. J. Olver and J. H. Wilkinson. A posteriori error bounds for Gaussian elimination. *IMA Journal of Numerical Analysis*, 2(4):377–406, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Olver:2006:MFN**
- [1793] Sheehan Olver. Moment-free numerical integration of highly oscillatory functions. *IMA Journal of Numerical Analysis*, 26(2):213–227, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/213>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/213>.
- Olver:2021:OSQ**
- [1794] Sheehan Olver and Yuan Xu. Orthogonal structure on a quadratic curve. *IMA Journal of Numerical Analysis*, 41(1):206–246, January 2021. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/206/5821508>.

Omladic:1992:AQF

- [1795] Matjaž Omladič. Average quadrature formulas of Gauss type. *IMA Journal of Numerical Analysis*, 12(2):189–199, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

O'Neill:2021:LBN

- [1796] Michael O'Neill and Stephen J. Wright. A log-barrier Newton–CG method for bound constrained optimization with complexity guarantees. *IMA Journal of Numerical Analysis*, 41(1):84–121, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/84/5821509>.

Ortner:2011:NFE

- [1797] Christoph Ortner. Nonconforming finite-element discretization of convex variational problems. *IMA Journal of Numerical Analysis*, 31(3):847–864, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/847.full.pdf+html>.

Ortner:2014:PEC

- [1798] Christoph Ortner and Hao Wang. A posteriori error control for a quasi-continuum approximation of a periodic chain. *IMA Journal of Numerical Analysis*, 34(3):977–1001, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (elec-

tronic). URL <http://imajna.oxfordjournals.org/content/34/3/977>.

Osada:1992:MOS

- [1799] Naoki Osada. A method for obtaining sequence transformations. *IMA Journal of Numerical Analysis*, 12(1):85–94, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Osborne:1992:EMC

- [1800] M. R. Osborne. An effective method for computing regression quantiles. *IMA Journal of Numerical Analysis*, 12(2):151–166, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Osborne:2010:ABL

- [1801] M. R. Osborne. Asymptotic behaviour in linear least squares problems. *IMA Journal of Numerical Analysis*, 30(1):241–247, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/241>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/241>.

Osborne:2000:NAV

- [1802] M. R. Osborne, Brett Presnell, and B. A. Turlach. A new approach to variable selection in least squares problems. *IMA Journal of Numerical Analysis*, 20(3):389–403, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200389.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200389.pdf.

Osborne:1999:NAS

- [1803] M. R. Osborne and Linping Sun. A new approach to symmetric rank-one updating. *IMA Journal of Numerical Analysis*, 19(4):497–507, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190497.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190497.pdf.

Ostermann:1990:HEE

- [1804] Alexander Ostermann. A half-explicit extrapolation method for differential-algebraic systems of index 3. *IMA Journal of Numerical Analysis*, 10(2):171–180, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ostermann:2020:LTE

- [1805] Alexander Ostermann and Chunmei Su. A Lawson-type exponential integrator for the Korteweg–de Vries equation. *IMA Journal of Numerical Analysis*, 40(4):2399–2414, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2399/5588351>.

Ostermann:2000:NSD

- [1806] Alexander Ostermann and Mechthild Thalhammer. Non-smooth data error estimates for linearly implicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 20(2):167–184, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200167.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200167.pdf.

http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200167.pdf.

Oswald:1998:OMP

- [1807] Peter Oswald. An optimal multi-level preconditioner for solenoidal approximations of the two-dimensional Stokes problem. *IMA Journal of Numerical Analysis*, 18(2):207–228, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180207.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180207.pdf.

Otarola:2024:SOC

- [1808] Enrique Otárola. Semilinear optimal control with Dirac measures. *IMA Journal of Numerical Analysis*, 44(6):3573–3594, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3573/7450353>.

Oyarzua:2014:EDF

- [1809] Ricardo Oyarzúa, Tong Qin, and Dominik Schötzau. An exactly divergence-free finite element method for a generalized Boussinesq problem. *IMA Journal of Numerical Analysis*, 34(3):1104–1135, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1104>.

Pachon:2010:PSC

- [1810] Ricardo Pachón, Rodrigo B. Platte, and Lloyd N. Trefethen. Piecewise-smooth chebfuns. *IMA Journal of*

Numerical Analysis, 30(4):898–916, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/898.full.pdf+html>.

Pages:2021:WSE

- [1811] Gilles Pagès and Abass Sagna. Weak and strong error analysis of recursive quantization: a general approach with an application to jump diffusions. *IMA Journal of Numerical Analysis*, 41(4):2668–2707, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2668/5912729>.

Palagallo:1987:NBA

- [1812] Judith A. Palagallo and Thomas E. Price, Jr. Near-best approximation by averaging polynomial interpolants. *IMA Journal of Numerical Analysis*, 7(1):107–122, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Palencia:1984:ETI

- [1813] C. Palencia and J. M. Sanz-Serna. Equivalence theorems for incomplete spaces: an appraisal. *IMA Journal of Numerical Analysis*, 4(1):109–115, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pan:1994:MCC

- [1814] K. Pan. On Mason’s conjecture concerning interpolation by polynomials in z and z^{-1} on an annulus. *IMA Journal of Numerical Analysis*, 14(4):599–604,

1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pani:1991:FEG

- [1815] A. K. Pani and P. C. Das. A finite element Galerkin method for a unidimensional single-phase nonlinear Stefan problem with Dirichlet boundary conditions. *IMA Journal of Numerical Analysis*, 11(1):99–113, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pani:1991:PEE

- [1816] A. K. Pani and P. C. Das. A priori error estimates for a single-phase quasilinear Stefan problem in one space dimension. *IMA Journal of Numerical Analysis*, 11(3):377–392, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pani:1999:QMP

- [1817] Amiya K. Pani. A qualocation method for parabolic partial differential equations. *IMA Journal of Numerical Analysis*, 19(3):473–495, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190473.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190473.pdf.

Pani:2002:GMF

- [1818] Amiya K. Pani and Graeme Fairweather. H^1 -Galerkin mixed finite element methods for parabolic partial integro-differential equations. *IMA Journal of Numerical Analysis*, 22(2):231–252, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-

- 3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220231.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220231.pdf.
- Papamichael:1986:PCN**
- [1822] N. Papamichael and Maria Joana Soares. A posteriori corrections for nonperiodic cubic and quintic interpolating splines at equally spaced knots. *IMA Journal of Numerical Analysis*, 6(4):489–502, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Papez:2018:RBP**
- [1823] Jan Papez and Zdenek Strakos. On a residual-based a posteriori error estimator for the total error. *IMA Journal of Numerical Analysis*, 38(3):1164–1184, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1164/4124871>.
- Pares-Pulido:2023:FVM**
- [1824] Carlos Parés-Pulido. Finite volume methods for the computation of statistical solutions of the incompressible Euler equations. *IMA Journal of Numerical Analysis*, 43(5):3073–3108, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/3073/6795269>.
- Parks:2019:CEP**
- [1825] Helen Parks and Melvin Leok. Constructing equivalence-preserving Dirac variational integrators with forces. *IMA Journal of Numerical Analysis*, 39(4):1706–1726, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1706/5069580>.
- Pani:2005:SFE**
- [1819] Amiya K. Pani and Jin Yun Yuan. Semidiscrete finite element Galerkin approximations to the equations of motion arising in the Oldroyd model. *IMA Journal of Numerical Analysis*, 25(4):750–782, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/750>.
- Pani:2010:AOS**
- [1820] Amiya Kumar Pani, Graeme Fairweather, and Ryan I. Fernandes. ADI orthogonal spline collocation methods for parabolic partial integro-differential equations. *IMA Journal of Numerical Analysis*, 30(1):248–276, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/248>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/248>.
- Papamichael:1993:NMC**
- [1821] N. Papamichael, M. J. Soares, and N. S. Stylianopoulos. A numerical method for the computation of Faber polynomials for starlike domains. *IMA Journal of Numerical Analysis*, 13(2):181–193, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Parlett:1981:TPL

- [1826] B. N. Parlett and J. K. Reid. Tracking the progress of the Lanczos algorithm for large symmetric eigenproblems. *IMA Journal of Numerical Analysis*, 1(2):135–155, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pearson:2024:SPD

- [1827] John W. Pearson and Andreas Potschka. On symmetric positive definite preconditioners for multiple saddle-point systems. *IMA Journal of Numerical Analysis*, 44(3):1731–1750, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1731/7237437>.

Pechstein:2013:WPI

- [1828] Clemens Pechstein and Robert Scheichl. Weighted Poincaré inequalities. *IMA Journal of Numerical Analysis*, 33(2):652–686, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/652.full.pdf+html>.

Lee:2019:RPF

- [1829] Ching pei Lee and Stephen J. Wright. Random permutations fix a worst case for cyclic coordinate descent. *IMA Journal of Numerical Analysis*, 39(3):1246–1275, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1246/5060522>.

Pejcev:2012:EBG

- [1830] Aleksandar V. Pejcev and Miodrag M. Spalević. Error bounds for Gaussian quadrature formulae with Bernstein–Szegő weights that are rational modifications of Chebyshev weight functions of the second kind. *IMA Journal of Numerical Analysis*, 32(4):1733–1754, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1733.full.pdf+html>.

Pena:1996:PSL

- [1831] J. M. Peña. Pivoting strategies leading to small bounds of the errors for certain linear systems. *IMA Journal of Numerical Analysis*, 16(2):141–153, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160141.sgm.abs.html.

Peralta:2020:AFE

- [1832] Gilbert Peralta and Karl Kunisch. Analysis and finite element discretization for optimal control of a linear fluid-structure interaction problem with delay. *IMA Journal of Numerical Analysis*, 40(1):140–206, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/140/5177807>.

Perrin:2021:CFF

- [1833] Charlotte Perrin and Khaled Saleh. A convergent FV-FE scheme for the stationary compressible Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 41(2):826–899, April 2021.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/826/5839920>.

Phillips:1986:PSM

- [1834] George M. Phillips. A survey of results on the q -Bernstein polynomials. *IMA Journal of Numerical Analysis*, 30(1):277–288, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/277>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/277>.

Phillips:2010:SRB

Phillips:1985:EMC

- [1835] Timothy N. Phillips. An embedding method for the Cauchy–Riemann equations. *IMA Journal of Numerical Analysis*, 5(4):429–436, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Phillips:1988:LCG

- [1836] Timothy N. Phillips. On the Legendre coefficients of a general-order derivative of an infinitely differentiable function. *IMA Journal of Numerical Analysis*, 8(4):455–459, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Phillips:1989:FSS

- [1837] Timothy N. Phillips. Fourier series solutions to Poisson’s equation in rectangularly decomposable regions. *IMA Journal of Numerical Analysis*, 9(3):337–352, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

- [1838] Timothy N. Phillips, Thomas A. Zang, and M. Yousuff Hussaini. Preconditioners for the spectral multigrid method. *IMA Journal of Numerical Analysis*, 6(3):273–292, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pickering:1993:FSR

- [1839] W. M. Pickering and P. J. Harley. FFT solution of the Robbins problem. *IMA Journal of Numerical Analysis*, 13(2):215–233, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pidstrigach:2023:CPH

- [1840] Jakiw Pidstrigach. Convergence of preconditioned Hamiltonian Monte Carlo on Hilbert spaces. *IMA Journal of Numerical Analysis*, 43(5):2665–2713, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2665/6749010>.

Pierre:2010:UCF

- [1841] Morgan Pierre. Uniform convergence for a finite-element discretization of a viscous diffusion equation. *IMA Journal of Numerical Analysis*, 30(2):487–511, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/487>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/487>.

Pinar:2018:BPA

- [1842] Miguel A. Piñar and Yuan Xu. Best polynomial approximation on the unit ball. *IMA Journal of Numerical Analysis*, 38(3):1209–1228, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1209/3852524>.

Pinar:1999:SLI

- [1843] Mustafa Ç. Pinar and Bintong Chen. l_1 solution of linear inequalities. *IMA Journal of Numerical Analysis*, 19(1):19–37, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190019.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190019.pdf.

Ma:2001:CLL

- [1844] He ping Ma and Ben yu Guo. Composite Legendre-Laguerre pseudospectral approximation in unbounded domains. *IMA Journal of Numerical Analysis*, 21(2):587–602, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210587.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210587.pdf.

Pinkus:1988:BAC

- [1845] A. Pinkus and H. Strauss. Best approximation with coefficient constraints. *IMA Journal of Numerical Analysis*, 8(1):1–22, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Platte:2011:HFD

- [1846] Rodrigo B. Platte. How fast do radial basis function interpolants of analytic functions converge? *IMA Journal of Numerical Analysis*, 31(4):1578–1597, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1578.full.pdf+html>.

Plechac:2023:MPE

- [1847] Petr Plecháč, Gabriel Stoltz, and Ting Wang. Martingale product estimators for sensitivity analysis in computational statistical physics. *IMA Journal of Numerical Analysis*, 43(6):3430–3477, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3430/6936612>.

Plestenjak:2001:CMW

- [1848] Bor Plestenjak. A continuation method for a weakly elliptic two-parameter eigenvalue problem. *IMA Journal of Numerical Analysis*, 21(1):199–216, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210199.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210199.pdf.

Poghosyan:2011:ACP

- [1849] Arnak Poghosyan. On an auto-correction phenomenon of the Krylov–Gottlieb–Eckhoff method. *IMA Journal of Numerical Analysis*, 31(2):512–527, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

(electronic). URL <http://imajna.oxfordjournals.org/content/31/2/512.full.pdf+html>.

Pollock:2021: AAC

- [1850] Sara Pollock and Leo G. Rebholz. Anderson acceleration for contractive and noncontractive operators. *IMA Journal of Numerical Analysis*, 41(4): 2841–2872, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/2841/6065020>.

Pooley:2003: NCP

- [1851] D. M. Pooley, P. A. Forsyth, and K. R. Vetzal. Numerical convergence properties of option pricing PDEs with uncertain volatility. *IMA Journal of Numerical Analysis*, 23(2): 241–267, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230241.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230241.pdf.

Porter:1993: RGM

- [1852] D. Porter and D. S. G. Stirling. The re-iterated Galerkin method. *IMA Journal of Numerical Analysis*, 13(1):125–139, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Potra:1994: LOM

- [1853] F. A. Potra and E. Venturino. Low-order methods for Cauchy principal value integrals with endpoint singularities. *IMA Journal of Numerical Analysis*, 14(2):295–310, 1994. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Potts:2001: NLA

- [1854] Daniel Potts and Gabriele Steidl. A new linogram algorithm for computerized tomography. *IMA Journal of Numerical Analysis*, 21(3): 769–782, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210769.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210769.pdf.

Pötzsche:2010: CIM

- [1855] Christian Pötzsche and Martin Rasmussen. Computation of integral manifolds for Carathéodory differential equations. *IMA Journal of Numerical Analysis*, 30(2):401–430, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/401>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/401>.

Poulain:2022: CEA

- [1856] Alexandre Poulain and Katharina Schratz. Convergence, error analysis and longtime behavior of the scalar auxiliary variable method for the nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 42(4): 2853–2883, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/2853/6430444>.

Poullikkas:1998:MFS

- [1857] A. Poullikkas, A. Karageorghis, and G. Georgiou. The method of fundamental solutions for Signorini problems. *IMA Journal of Numerical Analysis*, 18(2):273–285, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180273.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180273.pdf.

Powell:2005:PFD

- [1858] Catherine E. Powell. Parameter-free H (div) preconditioning for a mixed finite element formulation of diffusion problems. *IMA Journal of Numerical Analysis*, 25(4):783–796, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/783>.

Powell:2009:BDP

- [1859] Catherine E. Powell and Howard C. Elman. Block-diagonal preconditioning for spectral stochastic finite-element systems. *IMA Journal of Numerical Analysis*, 29(2):350–375, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/350>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/350>.

Powell:1998:TSA

- [1860] M. J. D. Powell. A “taut string algorithm” for straightening a piecewise linear path in two dimensions.

IMA Journal of Numerical Analysis, 18(1):1–35, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180001.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180001.pdf.

Powell:2008:DNM

- [1861] M. J. D. Powell. Developments of NEWUOA for minimization without derivatives. *IMA Journal of Numerical Analysis*, 28(4):649–664, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/649>.

Powell:2010:CWR

- [1862] M. J. D. Powell. On the convergence of a wide range of trust region methods for unconstrained optimization. *IMA Journal of Numerical Analysis*, 30(1):289–301, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/289>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/289>.

Powell:1981:STP

- [1863] M. J. D. Powell and Ph. L. Toint. The Shanno–Toint procedure for updating sparse symmetric matrices. *IMA Journal of Numerical Analysis*, 1(4):403–413, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Powell:1984:CSC

- [1864] M. J. D. Powell and Y. Yuan. Conditions for superlinear convergence in l_1 and l_∞ solutions of overdetermined nonlinear equations. *IMA Journal of Numerical Analysis*, 4(2):241–251, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pozza:2017:GQQ

- [1865] Stefano Pozza, Miroslav S. Pranić, and Zdenek Strakos. Gauss quadrature for quasi-definite linear functionals. *IMA Journal of Numerical Analysis*, 37(3):1468–1495, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1468/2670009/Gauss-quadrature-for-quasi-definite-linear>.

Pozzi:2005:DDP

- [1866] Paola Pozzi. The discrete Douglas problem: convergence results. *IMA Journal of Numerical Analysis*, 25(2):337–378, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/337>; <http://imanum.oupjournals.org/cgi/reprint/25/2/337>.

Pozzi:2019:EFI

- [1867] Paola Pozzi and Björn Stinner. Elastic flow interacting with a lateral diffusion process: the one-dimensional graph case. *IMA Journal of Numerical Analysis*, 39(1):201–234, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL

<http://academic.oup.com/imajna/article/39/1/201/4904296>.

Pozzolini:2013:VIP

- [1868] C. Pozzolini, Y. Renard, and M. Salaun. Vibro-impact of a plate on rigid obstacles: existence theorem, convergence of a scheme and numerical simulations. *IMA Journal of Numerical Analysis*, 33(1):261–294, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/261.full.pdf+html>.

Prautzsch:1986:LCP

- [1869] Hartmut Prautzsch. The location of the control points in the case of box splines. *IMA Journal of Numerical Analysis*, 6(1):43–49, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Preston:2011:NMB

- [1870] Mark D. Preston, Peter G. Chamberlain, and Simon N. Chandler-Wilde. A Nyström method for a boundary value problem arising in unsteady water wave problems. *IMA Journal of Numerical Analysis*, 31(3):1123–1153, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1123.full.pdf+html>.

Priestley:1994:PNC

- [1871] A. Priestley. The positive and nearly conservative Lagrange–Galerkin method. *IMA Journal of Numerical Analysis*, 14(2):277–294, 1994.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Priestley:1997:MPN

- [1872] A. Priestley. The multidimensional positive and nearly conservative Lagrange–Galerkin method. Part II: The use of C^1 elements. *IMA Journal of Numerical Analysis*, 17(2): 177–199, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170177.sgm.abs.html.

Prohl:2022:SEE

- [1873] Andreas Prohl and Yanqing Wang. Strong error estimates for a space-time discretization of the linear-quadratic control problem with the stochastic heat equation with linear noise. *IMA Journal of Numerical Analysis*, 42(4): 3386–3429, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3386/6374279>.

Prohl:2024:CRR

- [1874] Andreas Prohl and Yanqing Wang. Convergence with rates for a Riccati-based discretization of SLQ problems with SPDEs. *IMA Journal of Numerical Analysis*, 44(6):3393–3434, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3393/7516982>. See correction [1875].

Prohl:2025:CCR

- [1875] Andreas Prohl and Yanqing Wang.

Correction to: Convergence with rates for a Riccati-based discretization of SLQ problems with SPDEs. *IMA Journal of Numerical Analysis*, 45(1): 631, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/631/7641611>. See [1874].

Pruess:1993:SPC

- [1876] Steven Pruess. Shape preserving C^2 cubic spline interpolation. *IMA Journal of Numerical Analysis*, 13(4):493–507, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pryce:1985:MEA

- [1877] J. D. Pryce. Multiplicative error analysis of matrix transformation algorithms. *IMA Journal of Numerical Analysis*, 5(4):437–445, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pryce:1986:ECP

- [1878] J. D. Pryce. Error control of phase-function shooting methods for Sturm–Liouville problems. *IMA Journal of Numerical Analysis*, 6(1):103–123, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pryce:1989:CIR

- [1879] J. D. Pryce. On the convergence of iterated remeshing. *IMA Journal of Numerical Analysis*, 9(3):315–335, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Pytlak:1994:CCG

- [1880] R. Pytlak. On the convergence of conjugate gradient algorithms. *IMA Jour-*

nal of Numerical Analysis, 14(3):443–460, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Qi:2011:ALD

- [1881] Houduo Qi and Defeng Sun. An augmented Lagrangian dual approach for the H -weighted nearest correlation matrix problem. *IMA Journal of Numerical Analysis*, 31(2):491–511, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/491.full.pdf+html>.

Qi:2019:EEF

- [1882] Ruisheng Qi and Xiaojie Wang. Error estimates of finite element method for semilinear stochastic strongly damped wave equation. *IMA Journal of Numerical Analysis*, 39(3):1594–1626, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1594/5032336>.

Qian:2024:EBE

- [1883] Yitian Qian, Shaohua Pan, and Lianghai Xiao. Error bound and exact penalty method for optimization problems with nonnegative orthogonal constraint. *IMA Journal of Numerical Analysis*, 44(1):120–156, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/120/7017336>.

Qin:2024:SNO

- [1884] Ouyuan Qin and Kuan Xu. Solving nonlinear ODEs with the ultras-

pherical spectral method. *IMA Journal of Numerical Analysis*, 44(6):3749–3779, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3749/7560584>.

Qiu:2016:SHM

- [1885] Weifeng Qiu and Ke Shi. A superconvergent HDG method for the incompressible Navier–Stokes equations on general polyhedral meshes. *IMA Journal of Numerical Analysis*, 36(4):1943–1967, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1943>.

Qiu:2020:MDM

- [1886] Weifeng Qiu and Ke Shi. A mixed DG method and an HDG method for incompressible magnetohydrodynamics. *IMA Journal of Numerical Analysis*, 40(2):1356–1389, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1356/5289475>.

Quell:2000:NSE

- [1887] Peter Quell. Nonlinear stability of entropy flux splitting schemes on bounded domains. *IMA Journal of Numerical Analysis*, 20(3):441–459, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200441.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200441.pdf.

Quiroz:2024:PRH

- [1888] Daniel Castanon Quiroz and Daniele A. Di Pietro. A pressure-robust HHO method for the solution of the incompressible Navier–Stokes equations on general meshes. *IMA Journal of Numerical Analysis*, 44(1):397–434, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/397/7107917>.

Radu:2025:YLF

- [1889] Bogdan Radu and Herbert Egger. A Yee-like finite-element scheme for Maxwell’s equations on unstructured grids. *IMA Journal of Numerical Analysis*, 45(2):1028–1053, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/1028/7687812>.

Radu:2018:RMC

- [1890] Florin A. Radu, Kundan Kumar, Jan M. Nordbotten, and Iuliu S. Pop. A robust, mass conservative scheme for two-phase flow in porous media including Hölder continuous nonlinearities. *IMA Journal of Numerical Analysis*, 38(2):884–920, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/884/3883930>.

Raina:1983:COQ

- [1891] B. L. Raina and N. Kaul. A class of optimal quadrature formulae. *IMA Journal of Numerical Analysis*, 3(1):119–125, 1983. CODEN IJNADH. ISSN

0272-4979 (print), 1464-3642 (electronic).

Ranocha:2021:SSE

- [1892] Hendrik Ranocha. On strong stability of explicit Runge–Kutta methods for nonlinear semibounded operators. *IMA Journal of Numerical Analysis*, 41(1):654–682, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/654/5760668>.

Rasch:2009:RIF

- [1893] Christian Rasch and Thomas Satzger. Remarks on the implementation of the fast marching method. *IMA Journal of Numerical Analysis*, 29(3):806–813, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/806>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/806>.

Rathsfeld:1996:EEE

- [1894] Andreas Rathsfeld. Error estimates and extrapolation for the numerical solution of Mellin convolution equations. *IMA Journal of Numerical Analysis*, 16(2):217–255, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160217.sgm.abs.html.

Ravindran:2019:PTS

- [1895] S. S. Ravindran. Partitioned time-stepping scheme for an MHD system with temperature-dependent coefficients. *IMA Journal of Numerical*

cal Analysis, 39(4):1860–1887, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/1860/5043156>.

Raydan:1993:BBC

- [1896] Marcos Raydan. On the Barzilai and Borwein choice of steplength for the gradient method. *IMA Journal of Numerical Analysis*, 13(3):321–326, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Rebollo:2018:TDM

- [1897] T. Chacon Rebollo and D. Yakoubi. A three-dimensional model for two coupled turbulent fluids: numerical analysis of a finite element approximation. *IMA Journal of Numerical Analysis*, 38(4):1927–1958, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1927/4099779>.

Reddy:2015:RVR

- [1898] G. Murali Mohan Reddy and Rajen K. Sinha. Ritz–Volterra reconstructions and a posteriori error analysis of finite element method for parabolic integro-differential equations. *IMA Journal of Numerical Analysis*, 35(1):341–371, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/341>.

Reginska:1986:SEA

- [1899] Teresa Regińska. Superconvergence of external approximation of eigenvalues of ordinary differential opera-

tors. *IMA Journal of Numerical Analysis*, 6(3):309–323, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Reifenberg:2000:NSB

- [1900] Michèle Reifenberg and Jean-Paul Berrut. Numerical solution of boundary integral equations by means of attenuation factors. *IMA Journal of Numerical Analysis*, 20(1):25–46, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200025.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200025.pdf.

Reisinger:2013:ALD

- [1901] Christoph Reisinger. Analysis of linear difference schemes in the sparse grid combination technique. *IMA Journal of Numerical Analysis*, 33(2):544–581, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/544.full.pdf+html>.

Reisinger:2024:EPE

- [1902] Christoph Reisinger, Wolfgang Stockinger, and Yufei Zhang. *A posteriori* error estimates for fully coupled McKean–Vlasov forward-backward SDEs. *IMA Journal of Numerical Analysis*, 44(4):2323–2369, July 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/4/2323/7273830>.

Reisinger:2014:INT

- [1903] Christoph Reisinger and Alan Whitley. The impact of a natural time change on the convergence of the Crank–Nicolson scheme. *IMA Journal of Numerical Analysis*, 34(3):1156–1192, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1156>.

Ren:2016:APS

- [1904] Zhi-Ru Ren and Yang Cao. An alternating positive-semidefinite splitting preconditioner for saddle point problems from time-harmonic eddy current models. *IMA Journal of Numerical Analysis*, 36(2):922–946, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/922>.

Fang:2011:SAB

- [1905] Haw ren Fang. Stability analysis of block LDL^T factorization for symmetric indefinite matrices. *IMA Journal of Numerical Analysis*, 31(2):528–555, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/528.full.pdf+html>.

Repin:2011:GRE

- [1906] Sergey I. Repin and Satyendra K. Tomar. Guaranteed and robust error bounds for nonconforming approximations of elliptic problems. *IMA Journal of Numerical Analysis*, 31(2):597–615, April 2011. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/597.full.pdf+html>.

Reusken:2015:ATF

- [1907] Arnold Reusken. Analysis of trace finite element methods for surface partial differential equations. *IMA Journal of Numerical Analysis*, 35(4):1568–1590, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1568>.

Reusken:2020:SFF

- [1908] Arnold Reusken. Stream function formulation of surface Stokes equations. *IMA Journal of Numerical Analysis*, 40(1):109–139, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/109/5133699>.

Rieger:2020:SIA

- [1909] Christian Rieger and Holger Wendland. Sampling inequalities for anisotropic tensor product grids. *IMA Journal of Numerical Analysis*, 40(1):285–321, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/285/5272536>.

Riess:1982:MPE

- [1910] R. D. Riess, L. W. Johnson, and J. Chen. Maximum precision in Elliott–Donaldson formulae. *IMA Journal of Numerical Analysis*, 2(4):429–435, October 1982. CODEN IJNADH. ISSN

0272-4979 (print), 1464-3642 (electronic).

Rivlin:1983:ORD

- [1911] T. J. Rivlin, St. Ruscheweyh, D. Shaffer, and K.-J. Wirths. Optimal recovery of the derivative of bounded analytic functions. *IMA Journal of Numerical Analysis*, 3(3):327–332, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Robinson:1992:VBE

- [1912] P. D. Robinson and A. J. Wathen. Variational bounds on the entries of the inverse of a matrix. *IMA Journal of Numerical Analysis*, 12(4):463–486, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Rodriguez:2017:GST

- [1913] Ana Alonso Rodríguez, Jessika Camaño, Riccardo Ghiloni, and Alberto Valli. Graphs, spanning trees and divergence-free finite elements in domains of general topology. *IMA Journal of Numerical Analysis*, 37(4):1986–2003, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1986/2670302>.

Rodriguez:2004:MFE

- [1914] Ana Alonso Rodríguez, Ralf Hiptmair, and Alberto Valli. Mixed finite element approximation of eddy current problems. *IMA Journal of Numerical Analysis*, 24(2):255–271, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/

http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240255.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240255.pdf.

Rodriguez:1993:NIL

- [1915] G. Rodriguez and S. Seatzu. On the numerical inversion of the Laplace transform in reproducing kernel Hilbert spaces. *IMA Journal of Numerical Analysis*, 13(3):463–475, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Romani:2016:EEC

- [1916] Lucia Romani, Victoria Hernández Mederos, and Jorge Estrada Sarlabous. Exact evaluation of a class of nonstationary approximating subdivision algorithms and related applications. *IMA Journal of Numerical Analysis*, 36(1):380–399, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/380>.

Roos:1996:NCU

- [1917] Hans-Görg Roos. A note on the conditioning of upwind schemes on Shishkin meshes. *IMA Journal of Numerical Analysis*, 16(4):529–538, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160529.sgm.abs.html.

Rosler:2025:CKG

- [1918] Frank Rösler and Christiane Tretter. Computing Klein–Gordon spectra. *IMA Journal of Numerical Analysis*, 45(2):734–776, March 2025. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/734/7737756>.

Rottmann-Matthes:2019:IRS

- [1919] Jens Rottmann-Matthes. An IMEX-RK scheme for capturing similarity solutions in the multidimensional Burgers's equation. *IMA Journal of Numerical Analysis*, 39(1):342–373, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/342/4591646>.

Roubicek:2020:CTD

- [1920] Tomáš Roubíček. Coupled time discretization of dynamic damage models at small strains. *IMA Journal of Numerical Analysis*, 40(3):1772–1791, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1772/5431182>.

Rovas:2006:RBO

- [1921] D. V. Rovas, L. Machiels, and Y. Ma-day. Reduced-basis output bound methods for parabolic problems. *IMA Journal of Numerical Analysis*, 26(3):423–445, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/423>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/423>.

Ruas:2021:ORF

- [1922] Vitoriano Ruas. Optimal-rate finite-element solution of Dirichlet problems

in curved domains with straight-edged tetrahedra. *IMA Journal of Numerical Analysis*, 41(2):1368–1410, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1368/5869588>.

Rubensson:2021:LIF

- [1923] Emanuel H. Rubensson, Anton G. Artemov, Anastasia Kruchinina, and Elias Rudberg. Localized inverse factorization. *IMA Journal of Numerical Analysis*, 41(1):729–763, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/729/5824482>.

Ruf:2022:FSC

- [1924] Adrian M. Ruf. Flux-stability for conservation laws with discontinuous flux and convergence rates of the front tracking method. *IMA Journal of Numerical Analysis*, 42(2):1116–1142, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1116/6248120>.

Rump:2003:OSN

- [1925] Siegfried M. Rump. Optimal scaling for p -norms and componentwise distance to singularity. *IMA Journal of Numerical Analysis*, 23(1):1–9, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230001.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230001.pdf.

Rumpf:2015:VTD

- [1926] Martin Rumpf and Benedikt Wirth. Variational time discretization of geodesic calculus. *IMA Journal of Numerical Analysis*, 35(3):1011–1046, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1011>.

Russo:2011:HFE

- [1927] Anahí Dello Russo and Ana Alonso. Hybrid finite element analysis of fluid-structure systems with coupling on curved interfaces. *IMA Journal of Numerical Analysis*, 31(4):1636–1682, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1636.full.pdf+html>.

Sablonniere:1987:EBH

- [1928] Paul Sablonnière. Error bounds for Hermite interpolation by quadratic splines on an α -triangulation. *IMA Journal of Numerical Analysis*, 7(4):495–508, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Saedpanah:2015:CGF

- [1929] Fardin Saedpanah. Continuous Galerkin finite element methods for hyperbolic integro-differential equations. *IMA Journal of Numerical Analysis*, 35(2):885–908, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/885>.

Saito:2007:CUF

- [1930] Norikazu Saito. Conservative up-wind finite-element method for a simplified Keller–Segel system modelling chemotaxis. *IMA Journal of Numerical Analysis*, 27(2):332–365, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/332>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/332>.

Saito:2021:VAD

- [1931] Norikazu Saito. Variational analysis of the discontinuous Galerkin time-stepping method for parabolic equations. *IMA Journal of Numerical Analysis*, 41(2):1267–1292, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1267/5843701>.

Salane:1981:SMN

- [1932] D. Salane and R. P. Tewarson. On symmetric minimum norm updates. *IMA Journal of Numerical Analysis*, 1(2):235–240, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Salaun:2015:LOF

- [1933] Michel Salaün and Stéphanie Salmon. Low-order finite element method for the well-posed bidimensional Stokes problem. *IMA Journal of Numerical Analysis*, 35(1):427–453, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/427>.

oxfordjournals.org/content/35/1/427.

Sander:2016:GFE

- [1934] Oliver Sander. Geodesic finite elements of higher order. *IMA Journal of Numerical Analysis*, 36(1):238–266, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/238>.

Sandstede:1997:CEN

- [1935] Björn Sandstede. Convergence estimates for the numerical approximation of homoclinic solutions. *IMA Journal of Numerical Analysis*, 17(3):437–462, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170437.sgm.abs.html.

Santos:1988:FEM

- [1936] Juan Enrique Santos, Jim Douglas, Jr., Mary E. Morley, and Oscar M. Lovera. Finite element methods for a model for full waveform acoustic logging. *IMA Journal of Numerical Analysis*, 8(4):415–433, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Santos-Palomo:2006:UDU

- [1937] Ángel Santos-Palomo and Pablo Guerrero-García. Updating and down-dating an upper trapezoidal sparse orthogonal factorization. *IMA Journal of Numerical Analysis*, 26(1):1–10, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/1>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/1>.

Sanz-Serna:1981:LIV

- [1938] J. M. Sanz-Serna. Linearly implicit variable coefficient methods of Lambert–Sigurdsson type. *IMA Journal of Numerical Analysis*, 1(1):39–45, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sanz-Serna:2009:MFE

- [1939] J. M. Sanz-Serna. Modulated Fourier expansions and heterogeneous multiscale methods. *IMA Journal of Numerical Analysis*, 29(3):595–605, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/595>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/595>.

Sanz-Serna:1991:NCR

- [1940] J. M. Sanz-Serna and D. F. Griffiths. A new class of results for the algebraic equations of implicit Runge–Kutta processes. *IMA Journal of Numerical Analysis*, 11(4):449–455, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sanz-Serna:1992:NUT

- [1941] J. M. Sanz-Serna and A. M. Stuart. A note on uniform in time error estimates for approximations to reaction-diffusion equations. *IMA Journal of Numerical Analysis*, 12(3):457–462, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

Sanz-Serna:1986:CNS

- [1942] J. M. Sanz-Serna and J. G. Verwer. Conservative and nonconservative schemes for the solution of the nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 6(1):25–42, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sanz-Serna:2019:SA

- [1943] J. M. Sanz-Serna and Beibei Zhu. A stroboscopic averaging algorithm for highly oscillatory delay problems. *IMA Journal of Numerical Analysis*, 39(3):1110–1133, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1110/4969764>.

Saranen:1992:QML

- [1944] J. Saranen and Ian H. Sloan. Quadrature methods for logarithmic-kernel integral equations on closed curves. *IMA Journal of Numerical Analysis*, 12(2):167–187, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sardella:2000:CFE

- [1945] Mirko Sardella. On a coupled finite element–finite volume method for convection-diffusion problems. *IMA Journal of Numerical Analysis*, 20(2):281–301, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200281.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200281.pdf.

[//www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200281.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200281.pdf).

Saunders:1984:VIS

- [1946] R. Saunders, J. Caldwell, and P. Wanless. A variational-iterative scheme applied to Burgers' equation. *IMA Journal of Numerical Analysis*, 4(3):349–362, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sauter:2010:REA

- [1947] Martin Sauter and Christian Wieners. Robust estimates for the approximation of the dynamic consolidation problem. *IMA Journal of Numerical Analysis*, 30(3):832–856, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/832>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/832>.

Sauter:2014:RBI

- [1948] S. Sauter and A. Veit. Retarded boundary integral equations on the sphere: exact and numerical solution. *IMA Journal of Numerical Analysis*, 34(2):675–699, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/675.full.pdf+html>.

Sayer:1983:SAI

- [1949] F. P. Sayer. Some aspects of infinite systems of linear simultaneous equations. *IMA Journal of Numerical Analysis*, 3(3):333–340, 1983. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Schagen:1984:SEU

- [1950] I. P. Schagen. Sequential exploration of unknown multidimensional functions as an aid to optimization. *IMA Journal of Numerical Analysis*, 4(3): 337–347, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Schatzle:2000:PZC

- [1951] Reiner Schätzle. On the perturbation of the zeros of complex polynomials. *IMA Journal of Numerical Analysis*, 20(2):185–202, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200185.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200185.pdf.

Schechter:1995:RCN

- [1952] Stephen Schechter. Rate of convergence of numerical approximations to homoclinic bifurcation points. *IMA Journal of Numerical Analysis*, 15(1):23–60, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Schittkowski:1983:NSC

- [1953] Klaus Schittkowski. The numerical solution of constrained linear least-squares problems. *IMA Journal of Numerical Analysis*, 3(1):11–36, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Schlichting:2022:SGS

- [1954] André Schlichting and Christian Seis. The Scharfetter–Gummel scheme for

aggregation-diffusion equations. *IMA Journal of Numerical Analysis*, 42(3):2361–2402, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2361/6277327>.

Schmitt:2001:EAR

- [1955] Bernhard A. Schmitt and Rüdiger Weiner. Equilibrium attractivity of Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 21(1):327–348, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210327.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210327.pdf.

Schmitt:2018:PHV

- [1956] Jeremy M. Schmitt and Melvin Leok. Properties of Hamiltonian variational integrators. *IMA Journal of Numerical Analysis*, 38(1):377–398, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/377/3065609>.

Schoberl:2008:ASP

- [1957] Joachim Schöberl, Jens M. Melenk, Clemens Pechstein, and Sabine Zaiglmayr. Additive Schwarz preconditioning for p -version triangular and tetrahedral finite elements. *IMA Journal of Numerical Analysis*, 28(1):1–24, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/1>; <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/1>;

[//imajna.oxfordjournals.org/cgi/reprint/28/1/1](http://imajna.oxfordjournals.org/cgi/reprint/28/1/1).

Schock:1985:ASC

- [1958] Eberhard Schock. Arbitrarily slow convergence, uniform convergence and superconvergence of Galerkin-like methods. *IMA Journal of Numerical Analysis*, 5(2):153–160, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Scholtes:2022:VCD

- [1959] Sebastian Scholtes, Henrik Schumacher, and Max Wardetzky. Variational convergence of discrete elasticae. *IMA Journal of Numerical Analysis*, 42(1):300–332, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/300/6041855>.

Schonfelder:1981:ECP

- [1960] J. L. Schonfelder and M. Razaz. Error control with polynomial approximations. *IMA Journal of Numerical Analysis*, 1(1):105–114, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Schoombie:1982:SPG

- [1961] S. W. Schoombie. Spline Petrov–Galerkin methods for the numerical solution of the Korteweg–de Vries equation. *IMA Journal of Numerical Analysis*, 2(1):95–109, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Schoombie:1991:SPS

- [1962] S. W. Schoombie. Stability properties and spurious period two solutions

in a numerical scheme for a reaction-diffusion equation with nonlinear diffusion. *IMA Journal of Numerical Analysis*, 11(4):553–578, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Schoombie:1981:EES

- [1963] S. W. Schoombie and J. F. Botha. Error estimates for the solution of the radial Schrödinger equation by the Rayleigh–Ritz finite element method. *IMA Journal of Numerical Analysis*, 1(1):47–63, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Schötzau:2021:ECM

- [1964] Dominik Schötzau, Carlo Marcati, and Christoph Schwab. Exponential convergence of mixed hp-DGFEM for the incompressible Navier–Stokes equations in R^2 . *IMA Journal of Numerical Analysis*, 41(3):1966–1999, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/1966/5900313>.

Schötzau:2001:ECG

- [1965] Dominik Schötzau and Christoph Schwab. Exponential convergence in a Galerkin least squares hp-FEM for Stokes flow. *IMA Journal of Numerical Analysis*, 21(1):53–80, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210053.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210053.pdf.

Schötzau:2004:MHD

- [1966] Dominik Schötzau, Christoph Schwab, and Andrea Toselli. Mixed hp-DGFEM for incompressible flows II: Geometric edge meshes. *IMA Journal of Numerical Analysis*, 24(2):273–308, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240273.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240273.pdf.

Schroll:1996:FDS

- [1967] Hans Joachim Schroll and Ragnar Winther. Finite-difference schemes for scalar conservation laws with source terms. *IMA Journal of Numerical Analysis*, 16(2):201–215, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160201.sgm.abs.html.

Schropp:2000:OSM

- [1968] Johannes Schropp. One-step and multistep procedures for constrained minimization problems. *IMA Journal of Numerical Analysis*, 20(1):135–152, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200135.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200135.pdf.

Schropp:2008:PRK

- [1969] Johannes Schropp. Projected Runge–Kutta methods for index 3 differential–

algebraic equations near equilibria, periodic orbits and attracting sets. *IMA Journal of Numerical Analysis*, 28(2):274–291, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/274>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/274>.

Schutz:2014:ACA

- [1970] Jochen Schütz and Georg May. An adjoint consistency analysis for a class of hybrid mixed methods. *IMA Journal of Numerical Analysis*, 34(3):1222–1239, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1222>.

Schweizer:2024:RBD

- [1971] B. Schweizer, M. Schäffner, and Y. Tjandrawidjaja. A radiation box domain truncation scheme for the wave equation. *IMA Journal of Numerical Analysis*, 44(2):920–944, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/920/7176047>.

Scott:1988:EOC

- [1972] Jennifer Scott and Sean McKee. On the exact order of convergence of discrete methods for Volterra-type equations. *IMA Journal of Numerical Analysis*, 8(4):511–515, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Seguin:2020:APD

- [1973] Nicolas Seguin and Magali Tournus. Asymptotic preserving discretization of a Jin–Xin model with implicit equilibrium manifold on a bounded domain. *IMA Journal of Numerical Analysis*, 40(1):530–562, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/530/5264877>.

Selwood:1996:CRC

- [1974] P. M. Selwood and A. J. Wathen. Convergence rates and classification for one-dimensional finite-element meshes. *IMA Journal of Numerical Analysis*, 16(1):65–74, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160065.sgm.abs.html.

Semper:1994:LFE

- [1975] Bill Semper. Locking in finite-element approximations to long thin extensible beams. *IMA Journal of Numerical Analysis*, 14(1):97–109, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sete:2020:NMH

- [1976] Olivier Sète and Jan Zur. A Newton method for harmonic mappings in the plane. *IMA Journal of Numerical Analysis*, 40(4):2777–2801, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2777/5628133>.

Sete:2022:TIM

- [1977] Olivier Sète and Jan Zur. The transport of images method: computing all zeros of harmonic mappings by continuation. *IMA Journal of Numerical Analysis*, 42(3):2403–2428, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2403/6295138>.

Seward:1984:SHO

- [1978] W. L. Seward, G. Fairweather, and R. L. Johnston. A survey of higher-order methods for the numerical integration of semidiscrete parabolic problems. *IMA Journal of Numerical Analysis*, 4(4):375–425, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Shampine:1983:EEM

- [1979] L. F. Shampine. Efficient extrapolation methods for ODEs. *IMA Journal of Numerical Analysis*, 3(4):383–395, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Shampine:1985:EEM

- [1980] L. F. Shampine. Efficient extrapolation methods for ODEs. II. *IMA Journal of Numerical Analysis*, 5(1):23–28, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Shampine:1988:SVI

- [1981] L. F. Shampine. Solving Volterra integral equations with ODE codes. *IMA Journal of Numerical Analysis*, 8(1):37–41, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sharon:2013:ASF

- [1982] Nir Sharon and Uri Itai. Approximation schemes for functions of positive-definite matrix values. *IMA Journal of Numerical Analysis*, 33(4):1436–1468, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1436.full.pdf+html>.

Sharp:2004:CID

- [1983] P. W. Sharp. Comparisons of integrators on a diverse collection of restricted three-body test problems. *IMA Journal of Numerical Analysis*, 24(4):557–575, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/557>; <http://imanum.oupjournals.org/cgi/reprint/24/4/557>.

Sharp:1990:TST

- [1984] P. W. Sharp, J. M. Fine, and K. Burrage. Two-stage and three-stage diagonally implicit Runge–Kutta Nyström methods of orders three and four. *IMA Journal of Numerical Analysis*, 10(4):489–504, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Shaw:2010:DEM

- [1985] S. Shaw, M. K. Warby, and J. R. Whiteman. Discretization error and modelling error in the context of the rapid inflation of hyperelastic membranes. *IMA Journal of Numerical Analysis*, 30(1):302–333, January 2010. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/302>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/302>.

Sheen:2003:PMT

- [1986] Dongwoo Sheen, Ian H. Sloan, and Vidar Thomée. A parallel method for time discretization of parabolic equations based on Laplace transformation and quadrature. *IMA Journal of Numerical Analysis*, 23(2):269–299, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230269.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230269.pdf.

Shen:1999:EBF

- [1987] Wen Shen. Error bounds of finite difference schemes for multi-dimensional scalar conservation laws with source terms. *IMA Journal of Numerical Analysis*, 19(1):77–89, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190077.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190077.pdf.

Shen:2006:TAS

- [1988] Xunyang Shen and Peter R. Turner. Taylor approximation for symmetric level-index arithmetic processing. *IMA Journal of Numerical Analysis*, 26(3):584–603, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

- (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/584>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/584>.
- Sheng:1989:SLP**
- [1989] Q. Sheng. Solving linear partial differential equations by exponential splitting. *IMA Journal of Numerical Analysis*, 9(2):199–212, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Sheng:1994:GEE**
- [1990] Qin Sheng. Global error estimates for exponential splitting. *IMA Journal of Numerical Analysis*, 14(1):27–56, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Shih:2000:IMS**
- [1991] Yin-Tzer Shih and Howard C. Elman. Iterative methods for stabilized discrete convection-diffusion problems. *IMA Journal of Numerical Analysis*, 20(3):333–358, 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200333.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200333.pdf.
- Shingel:2009:ISO**
- [1992] Tatiana Shingel. Interpolation in special orthogonal groups. *IMA Journal of Numerical Analysis*, 29(3):731–745, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/731>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/731>.
- Sidi:2012:UFE**
- [1993] Avram Sidi. A user-friendly extrapolation method for computing infinite range integrals of products of oscillatory functions. *IMA Journal of Numerical Analysis*, 32(2):602–631, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/602.full.pdf+html>.
- Sidi:1982:RAT**
- [1994] Avram Sidi and David Levin. Rational approximations from the d -transformation. *IMA Journal of Numerical Analysis*, 2(2):153–167, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Siebert:2011:CPA**
- [1995] Kunibert G. Siebert. A convergence proof for adaptive finite elements without lower bound. *IMA Journal of Numerical Analysis*, 31(3):947–970, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/947.full.pdf+html>.
- Simoncini:2020:NSC**
- [1996] Valeria Simoncini. On the numerical solution of a class of systems of linear matrix equations. *IMA Journal of Numerical Analysis*, 40(1):207–225, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oxfordjournals.org/content/40/1/207.full.pdf+html>.

oup.com/imajna/article/40/1/207/5195702.

Simoncini:2014:TNM

- [1997] Valeria Simoncini, Daniel B. Szyld, and Marlliny Monsalve. On two numerical methods for the solution of large-scale algebraic Riccati equations. *IMA Journal of Numerical Analysis*, 34(3):904–920, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/904>.

Simos:1991:SNF

- [1998] T. E. Simos. Some new four-step exponential-fitting methods for the numerical solution of the radial Schrödinger equation. *IMA Journal of Numerical Analysis*, 11(3):347–356, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Simos:2001:FAO

- [1999] T. E. Simos. A fourth algebraic order exponentially-fitted Runge–Kutta method for the numerical solution of the Schrödinger equation. *IMA Journal of Numerical Analysis*, 21(4):919–931, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210919.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210919.pdf.

Simpson:1994:TEA

- [2000] R. B. Simpson. Testing for effects of asymmetry and instability on preconditioned iterations of conjugate gradient type. *IMA Journal of Numerical*

Analysis, 14(1):1–25, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Singler:2011:CSA

- [2001] John R. Singler. Convergent snapshot algorithms for infinite-dimensional Lyapunov equations. *IMA Journal of Numerical Analysis*, 31(4):1468–1496, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1468.full.pdf+html>.

Sinha:2007:UFE

- [2002] Rajen Kumar Sinha and Bhupen Deka. An unfitted finite-element method for elliptic and parabolic interface problems. *IMA Journal of Numerical Analysis*, 27(3):529–549, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/529>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/529>.

Skrobanski:1990:BNM

- [2003] J. J. Skrobański. Bounded-norm matrix-inverse mappings. *IMA Journal of Numerical Analysis*, 10(4):537–554, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Slevinsky:2018:UHA

- [2004] Richard Mikaël Slevinsky. On the use of Hahn’s asymptotic formula and stabilized recurrence for a fast, simple and stable Chebyshev–Jacobi transform. *IMA Journal of Numerical Analysis*, 38(1):102–124, January 25, 2018.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/38/1/102/3038020>.

Sloan:1981:SAC

- [2005] D. M. Sloan. Stability and accuracy of a class of numerical boundary conditions for the advection equation. *IMA Journal of Numerical Analysis*, 1(3):285–301, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sloan:1986:PMI

- [2006] I. H. Sloan and A. Spence. Projection methods for integral equations on the half-line. *IMA Journal of Numerical Analysis*, 6(2):153–172, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sloan:1988:GMIA

- [2007] I. H. Sloan and A. Spence. The Galerkin method for integral equations of the first kind with logarithmic kernel: applications. *IMA Journal of Numerical Analysis*, 8(1):123–140, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sloan:1988:GMIB

- [2008] I. H. Sloan and A. Spence. The Galerkin method for integral equations of the first kind with logarithmic kernel: theory. *IMA Journal of Numerical Analysis*, 8(1):105–122, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sloan:1984:FVG

- [2009] Ian H. Sloan. Four variants of the Galerkin method for integral equations

of the second kind. *IMA Journal of Numerical Analysis*, 4(1):9–17, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sloan:1993:FOC

- [2010] Ian H. Sloan, Dat Tran, and Graeme Fairweather. A fourth-order cubic spline method for linear second-order two-point boundary value problems. *IMA Journal of Numerical Analysis*, 13(4):591–607, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Slodicka:2006:TDS

- [2011] M. Slodicka. A time discretization scheme for a non-linear degenerate eddy current model for ferromagnetic materials. *IMA Journal of Numerical Analysis*, 26(1):173–187, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/173>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/173>.

Small:1988:CDN

- [2012] R. D. Small and R. J. Charron. Continuous and discrete nonlinear approximations based on Fourier series. *IMA Journal of Numerical Analysis*, 8(3):281–293, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Smarzewski:1983:UCC

- [2013] R. Smarzewski and A. Bujalska. Uniform convergence of cubic and quadratic X -spline interpolants. *IMA Journal of Numerical Analysis*, 3(3):

353–372, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Smears:2017:REP

- [2014] Iain Smears. Robust and efficient preconditioners for the discontinuous Galerkin time-stepping method. *IMA Journal of Numerical Analysis*, 37(4):1961–1985, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1961/2433377>.

Smith:1997:IAT

- [2015] Antony Smith and David Silvester. Implicit algorithms and their linearization for the transient incompressible Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 17(4):527–545, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170527.sgm.abs.html.

Smitheman:2010:SCM

- [2016] S. A. Smitheman, E. A. Spence, and A. S. Fokas. A spectral collocation method for the Laplace and modified Helmholtz equations in a convex polygon. *IMA Journal of Numerical Analysis*, 30(4):1184–1205, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1184.full.pdf+html>.

Sogn:2019:SCP

- [2017] Jarle Sogn and Walter Zulehner. Schur complement preconditioners for mul-

tipple saddle point problems of block tridiagonal form with application to optimization problems. *IMA Journal of Numerical Analysis*, 39(3):1328–1359, July 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/3/1328/5000058>.

Solano:2022:HMD

- [2018] Manuel Solano, Sébastien Terrana, Ngoc-Cuong Nguyen, and Jaime Peraire. An HDG method for dissimilar meshes. *IMA Journal of Numerical Analysis*, 42(2):1665–1699, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1665/6347737>.

Soler:1990:VFM

- [2019] Juan Soler. Vortex filament method. *IMA Journal of Numerical Analysis*, 10(1):75–102, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sonar:1996:ORU

- [2020] Thomas Sonar. Optimal recovery using thin plate splines in finite volume methods for the numerical solution of hyperbolic conservation laws. *IMA Journal of Numerical Analysis*, 16(4):549–581, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160549.sgm.abs.html.

Song:2022:MHV

- [2021] L. Song and L. N. Vicente. Modeling Hessian-vector products in nonlinear optimization: new Hessian-free

methods. *IMA Journal of Numerical Analysis*, 42(2):1766–1788, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1766/6199349>.

Sorokina:2014:RSC

- [2022] T. Sorokina. Redundancy of smoothness conditions and supersmoothness of bivariate splines. *IMA Journal of Numerical Analysis*, 34(4):1701–1714, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1701>.

Sorokina:2007:LQI

- [2023] Tatyana Sorokina and Frank Zeilfelder. Local quasi-interpolation by cubic C^1 splines on type-6 tetrahedral partitions. *IMA Journal of Numerical Analysis*, 27(1):74–101, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/74>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/74>.

Sousa:2022:CAG

- [2024] Ercilia Sousa. Consistency analysis of the Grünwald–Letnikov approximation in a bounded domain. *IMA Journal of Numerical Analysis*, 42(3):2771–2793, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2771/6310602>.

Speleers:2008:MMP

- [2025] Hendrik Speleers, Paul Dierckx, and Stefan Vandewalle. Multigrid methods with Powell–Sabin splines. *IMA Journal of Numerical Analysis*, 28(4):888–908, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/888>.

Spence:1983:SPG

- [2026] A. Spence and K. S. Thomas. On superconvergence properties of Galerkin’s method for compact operator equations. *IMA Journal of Numerical Analysis*, 3(3):253–271, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Spence:1982:NTP

- [2027] A. Spence and B. Werner. Nonsimple turning points and cusps. *IMA Journal of Numerical Analysis*, 2(4):413–427, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Srivastav:1983:NSSb

- [2028] R. P. Srivastav. Numerical solution of singular integral equations using Gauss-type formulae. I. Quadrature and collocation on Chebyshev nodes. *IMA Journal of Numerical Analysis*, 3(3):305–318, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Srivastav:1983:NSSa

- [2029] R. P. Srivastav and Erica Jen. Numerical solution of singular integral equations using Gauss-type formulae.

II. Lobatto-Chebyshev quadrature and collocation on Chebyshev nodes. *IMA Journal of Numerical Analysis*, 3(3): 319–325, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Stein:1997:BHF

- [2030] O. Stein. Bifurcations of hyperbolic fixed points for explicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 17(2):151–175, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170151.sgm.abs.html. See erratum [2031].

Stein:1998:EBH

- [2031] O. Stein. Erratum: “Bifurcations of hyperbolic fixed points for explicit Runge–Kutta methods” [IMA J. Numer. Anal. 17 (1997), no. 2, 151–175; MR 98d:65103]. *IMA Journal of Numerical Analysis*, 18(2): 329, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180329.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180329.pdf. See [2030].

Steinbach:2016:TFP

- [2032] Olaf Steinbach, Barbara Wohlmuth, and Linus Wunderlich. Trace and flux a priori error estimates in finite-element approximations of Signornitype problems. *IMA Journal of Numerical Analysis*, 36(3):1072–1095, July 2016. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1072>.

Stephan:2000:DDA

- [2033] Ernst P. Stephan and Thanh Tran. Domain decomposition algorithms for indefinite weakly singular integral equations: the h and p versions. *IMA Journal of Numerical Analysis*, 20(1): 1–24, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200001.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200001.pdf.

Stevenson:2008:CDO

- [2034] Rob Stevenson and Manuel Werner. Computation of differential operators in aggregated wavelet frame coordinates. *IMA Journal of Numerical Analysis*, 28(2):354–381, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/354>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/354>.

Stevenson:2021:SGD

- [2035] Rob Stevenson and Jan Westerdiep. Stability of Galerkin discretizations of a mixed space–time variational formulation of parabolic evolution equations. *IMA Journal of Numerical Analysis*, 41(1):28–47, January 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/1/28/5721757>.

Stevenson:2014:FOS

- [2036] Rob P. Stevenson. First-order system least squares with inhomogeneous boundary conditions. *IMA Journal of Numerical Analysis*, 34(3):863–878, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/863>.

Stewart:1997:PCF

- [2037] G. W. Stewart. On the perturbation of LU and Cholesky factors. *IMA Journal of Numerical Analysis*, 17(1):1–6, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170001.sgm.abs.html.

Stewart:1997:TMG

- [2038] G. W. Stewart. The triangular matrices of Gaussian elimination and related decompositions. *IMA Journal of Numerical Analysis*, 17(1):7–16, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170007.sgm.abs.html.

Stoll:2014:OSS

- [2039] Martin Stoll. One-shot solution of a time-dependent time-periodic PDE-constrained optimization problem. *IMA Journal of Numerical Analysis*, 34(4):1554–1577, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1554>.

Strauss:2011:QPM

- [2040] Michael Strauss. Quadratic projection methods for approximating the spectrum of self-adjoint operators. *IMA Journal of Numerical Analysis*, 31(1):40–60, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/40.full.pdf+html>.

Streit:1989:EET

- [2041] Uwe Streit. An efficient enthalpy-type method for the Stefan problem. *IMA Journal of Numerical Analysis*, 9(3):353–372, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Strossner:2023:FGS

- [2042] Christoph Strössner and Daniel Kressner. Fast global spectral methods for three-dimensional partial differential equations. *IMA Journal of Numerical Analysis*, 43(3):1519–1542, May 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1519/6628875>.

Stuart:1989:LII

- [2043] Andrew Stuart. Linear instability implies spurious periodic solutions. *IMA Journal of Numerical Analysis*, 9(4):465–486, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Styles:2001:EEF

- [2044] Vanessa Styles. Error estimates for a finite-difference approximation of a

- mean field model of superconducting vortices in one-dimension. *IMA Journal of Numerical Analysis*, 21(3): 667–701, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210667.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210667.pdf.
- Stynes:2015:FDM**
- [2045] Martin Stynes and José Luis Gracia. A finite difference method for a two-point boundary value problem with a Caputo fractional derivative. *IMA Journal of Numerical Analysis*, 35(2):698–721, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/698>.
- Stynes:2001:SDM**
- [2046] Martin Stynes and Lutz Tobiska. The streamline-diffusion method for non-conforming Q elements on rectangular tensor-product meshes. *IMA Journal of Numerical Analysis*, 21(1): 123–142, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210123.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210123.pdf.
- Su:2018:EEF**
- [2047] Chunmei Su and Wenfan Yi. Error estimates of a finite difference method for the Klein–Gordon–Zakharov system in the subsonic limit regime. *IMA Journal of Numerical Analysis*, 38(4): 2055–2073, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2055/4082920>.
- Suli:2020:FDF**
- [2048] Endre Süli and Tabea Tschierpel. Fully discrete finite element approximation of unsteady flows of implicitly constituted incompressible fluids. *IMA Journal of Numerical Analysis*, 40(2):801–849, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/801/5310121>.
- Sun:1995:FEMb**
- [2049] Guang Fu Sun and Martin Stynes. Finite-element methods for singularly perturbed high-order elliptic two-point boundary value problems. I. Reaction-diffusion-type problems. *IMA Journal of Numerical Analysis*, 15(1):117–139, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Sun:1995:FEMa**
- [2050] Guang Fu Sun and Martin Stynes. Finite-element methods for singularly perturbed high-order elliptic two-point boundary value problems. II. Convection-diffusion-type problems. *IMA Journal of Numerical Analysis*, 15(2):197–219, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Sun:1996:OBP**
- [2051] Ji-Guang Sun. Optimal backward perturbation bounds for the linear least-squares problem with multi-

ple right-hand sides. *IMA Journal of Numerical Analysis*, 16(1): 1–11, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160001.sgm.abs.html.

Sun:2023:EIE

- [2052] Ting Sun and Chunxiong Zheng. Efficient implementation of the exact artificial boundary condition for the exterior problem of the Stokes system in three dimensions. *IMA Journal of Numerical Analysis*, 43(2): 1061–1088, March 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/2/1061/6533827>.

Sun:2008:IQR

- [2053] Weiwei Sun and Jiming Wu. Interpolatory quadrature rules for Hadamard finite-part integrals and their superconvergence. *IMA Journal of Numerical Analysis*, 28(3):580–597, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/580>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/580>.

Sun:2001:NAE

- [2054] Xiaodi Sun. Numerical analysis of an exponentially ill-conditioned boundary value problem with applications to metastable problems. *IMA Journal of Numerical Analysis*, 21(4):817–842, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-

3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210817.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210817.pdf.

Surla:1990:SUC

- [2055] K. Surla and Z. Uzelac. Some uniformly convergent spline difference schemes for singularly perturbed boundary value problems. *IMA Journal of Numerical Analysis*, 10(2):209–222, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Sutton:2024:SDN

- [2056] Brian D. Sutton. Simultaneous diagonalization of nearly commuting Hermitian matrices: do-one-then-do-the-other. *IMA Journal of Numerical Analysis*, 44(2):1061–1089, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/1061/7192244>.

Sutton:2020:LTP

- [2057] Oliver J. Sutton. Long-time $L^\infty(L^2)$ a posteriori error estimates for fully discrete parabolic problems. *IMA Journal of Numerical Analysis*, 40(1):498–529, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/498/5256710>.

Szyld:2014:SPI

- [2058] Daniel B. Szyld and Fei Xue. Several properties of invariant pairs of nonlinear algebraic eigenvalue problems. *IMA Journal of Numerical Analysis*, 34(3): 921–954, July 2014. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/921>.

Tadmor:2005:AFP

- [2059] Eitan Tadmor and Jared Tanner. Adaptive filters for piecewise smooth spectral data. *IMA Journal of Numerical Analysis*, 25(4):635–647, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/635>.

Taguchi:2022:EEA

- [2060] Dai Taguchi, Akihiro Tanaka, and Tomooki Yuasa. L^q -error estimates for approximation of irregular functionals of random vectors. *IMA Journal of Numerical Analysis*, 42(1):840–873, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/840/6102276>.

Tan:1987:CDE

- [2061] Roger C. E. Tan. Computing derivatives of eigensystems by the vector ϵ -algorithm. *IMA Journal of Numerical Analysis*, 7(4):485–494, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Tan:1989:CDE

- [2062] Roger C. E. Tan and Alan L. Andrew. Computing derivatives of eigenvalues and eigenvectors by simultaneous iteration. *IMA Journal of Numerical Analysis*, 9(1):111–122, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Tan:2020:STP

- [2063] Wee Chin Tan and Viet Ha Hoang. Sparse tensor product finite element method for nonlinear multiscale variational inequalities of monotone type. *IMA Journal of Numerical Analysis*, 40(3):1875–1907, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1875/5380580>.

Tanaka:2016:FAN

- [2064] Ken'ichiro Tanaka. A fast and accurate numerical method for symmetric Lévy processes based on the Fourier transform and sinc-Gauss sampling formula. *IMA Journal of Numerical Analysis*, 36(3):1362–1388, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1362>.

Tanaka:2017:PTA

- [2065] Ken'ichiro Tanaka, Tomoaki Okayama, and Masaaki Sugihara. Potential theoretic approach to design of accurate formulas for function approximation in symmetric weighted Hardy spaces. *IMA Journal of Numerical Analysis*, 37(2):861–904, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/861/2669979/Potential-theoretic-approach-to-design-of-accurate>.

Tanaka:2019:DAF

- [2066] Ken'ichiro Tanaka and Masaaki Sugihara. Design of accurate formu-

las for approximating functions in weighted Hardy spaces by discrete energy minimization. *IMA Journal of Numerical Analysis*, 39(4):1957–1984, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/39/4/1957/5075943>.

Tang:1993:NCM

- [2067] Tao Tang. A note on collocation methods for Volterra integro-differential equations with weakly singular kernels. *IMA Journal of Numerical Analysis*, 13(1):93–99, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Tang:2022:SAG

- [2068] Xiao Tang and Jie Xiong. Stability analysis of general multistep methods for Markovian backward stochastic differential equations. *IMA Journal of Numerical Analysis*, 42(2):1789–1805, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/42/2/1789/6263485>.

Tao:2016:VLI

- [2069] Molei Tao and Houman Owhadi. Variational and linearly implicit integrators, with applications. *IMA Journal of Numerical Analysis*, 36(1):80–107, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imagna.oxfordjournals.org/content/36/1/80>.

Tarvainen:1999:TLS

- [2070] Pasi Tarvainen. Two-level Schwarz method for unilateral variational inequalities. *IMA Journal of Numerical Analysis*, 19(2):273–290, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190273.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190273.pdf.

Taylor:2010:LCL

- [2071] Rodney Taylor and Vilmos Totik. Lebesgue constants for Leja points. *IMA Journal of Numerical Analysis*, 30(2):462–486, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imagna.oxfordjournals.org/cgi/content/abstract/30/2/462>; <http://imagna.oxfordjournals.org/cgi/reprint/30/2/462>.

teRiele:1982:CMW

- [2072] Herman J. J. te Riele. Collocation methods for weakly singular second-kind Volterra integral equations with nonsmooth solution. *IMA Journal of Numerical Analysis*, 2(4):437–449, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Thatcher:1982:CSD

- [2073] R. W. Thatcher and S. L. Askew. A complementary solution to the dam problem. *IMA Journal of Numerical Analysis*, 2(2):229–239, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Editors:2001:E

- [2074] The Editors. Editorial. *IMA Journal of Numerical Analysis*, 21(1):0, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210000.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210000.pdf.

Ting:1981:CPB

- [2075] B. Y. Ting and Y. L. Luke. Conversion of polynomials between different polynomial bases. *IMA Journal of Numerical Analysis*, 1(2):229–234, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Titarev:2007:AAA

- [2076] V. A. Titarev and E. F. Toro. Analysis of ADER and ADER-WAF schemes. *IMA Journal of Numerical Analysis*, 27(3):616–630, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/616>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/616>.

Titley-Peloquin:2014:GCB

- [2077] David Titley-Peloquin, Jennifer Pestana, and Andrew J. Wathen. GMRES convergence bounds that depend on the right-hand-side vector. *IMA Journal of Numerical Analysis*, 34(2):462–479, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/462.full.pdf+html>.

Tobiska:2015:RPE

- [2078] L. Tobiska and R. Verfürth. Robust a posteriori error estimates for stabilized finite element methods. *IMA Journal of Numerical Analysis*, 35(4):1652–1671, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1652>.

Todd:1989:CPA

- [2079] Michael J. Todd. On convergence properties of algorithms for unconstrained minimization. *IMA Journal of Numerical Analysis*, 9(3):435–441, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Todor:2009:NAE

- [2080] Radu-Alexandru Todor. A new approach to energy-based sparse finite-element spaces. *IMA Journal of Numerical Analysis*, 29(1):72–85, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Todor:2007:CRS

- [2081] Radu Alexandru Todor and Christoph Schwab. Convergence rates for sparse chaos approximations of elliptic problems with stochastic coefficients. *IMA Journal of Numerical Analysis*, 27(2):232–261, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/232>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/232>.

Toint:1988:GCC

- [2082] Ph. L. Toint. Global convergence of a class of trust-region methods for nonconvex minimization in Hilbert space. *IMA Journal of Numerical Analysis*, 8(2):231–252, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Torelli:1993:SCQ

- [2083] L. Torelli and R. Vermiglio. On the stability of continuous quadrature rules for differential equations with several constant delays. *IMA Journal of Numerical Analysis*, 13(2):291–302, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Toro:1997:URP

- [2084] E. F. Toro and S. J. Billett. A unified Riemann-problem-based extension of the Warming-Beam and Lax-Wendroff schemes. *IMA Journal of Numerical Analysis*, 17(1):61–102, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170061.sgm.abs.html.

Toro:2000:CTS

- [2085] E. F. Toro and S. J. Billett. Centred TVD schemes for hyperbolic conservation laws. *IMA Journal of Numerical Analysis*, 20(1):47–79, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200047.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200047.pdf.

Torrilhon:2006:SCK

- [2086] Manuel Torrilhon and Kun Xu. Stability and consistency of kinetic unwinding for advection–diffusion equations. *IMA Journal of Numerical Analysis*, 26(4):686–722, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/686>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/686>.

Toselli:2006:DPF

- [2087] Andrea Toselli. Dual-primal FETI algorithms for edge finite-element approximations in 3D. *IMA Journal of Numerical Analysis*, 26(1):96–130, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/96>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/96>.

Toselli:2004:DDP

- [2088] Journal Andrea Toselli and Xavier Vasseur. Domain decomposition preconditioners of Neumann–Neumann type for hp approximations on boundary layer meshes in three dimensions. *IMA Journal of Numerical Analysis*, 24(1):123–156, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240123.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240123.pdf.

Tourigny:1990:PAN

- [2089] Yves Tourigny. Product approximation for nonlinear Klein–Gordon equations. *IMA Journal of Numerical Analysis*, 10(3):449–462, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Tourigny:1991:OET

- [2090] Yves Tourigny. Optimal H^1 estimates for two time-discrete Galerkin approximations of a nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 11(4):509–523, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Townsend:2016:FCG

- [2091] Alex Townsend, Thomas Trogdon, and Sheehan Olver. Fast computation of Gauss quadrature nodes and weights on the whole real line. *IMA Journal of Numerical Analysis*, 36(1):337–358, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/337>.

Trefethen:2010:HTQ

- [2092] Lloyd N. Trefethen. Householder triangularization of a quasimatrix. *IMA Journal of Numerical Analysis*, 30(4):887–897, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/887.full.pdf+html>.

Trogdon:2016:RHA

- [2093] Thomas Trogdon and Sheehan Olver. A Riemann–Hilbert approach to Ja-

cobi operators and Gaussian quadrature. *IMA Journal of Numerical Analysis*, 36(1):174–196, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/174>.

Tsao:1993:NCD

- [2094] Nai Kuan Tsao and Tse-Chien Sun. On the numerical computation of the derivatives of a B-spline series. *IMA Journal of Numerical Analysis*, 13(3):343–364, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Tu:2023:BAO

- [2095] Xuemin Tu and Jinjin Zhang. BDDC algorithms for Oseen problems with HDG discretizations. *IMA Journal of Numerical Analysis*, 43(6):3478–3521, November 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/6/3478/6834124>.

Tuomela:2006:NSI

- [2096] Jukka Tuomela, Teijo Arponen, and Villem Normi. On the numerical solution of involutive ordinary differential systems: enhanced linear algebra. *IMA Journal of Numerical Analysis*, 26(4):811–846, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/811>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/811>.

Tupper:2005:TPM

- [2097] P. F. Tupper. A test problem for molecular dynamics integrators. *IMA Journal of Numerical Analysis*, 25(2):286–309, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/286>; <http://imanum.oupjournals.org/cgi/reprint/25/2/286>.

Turner:1982:DLS

- [2098] Peter R. Turner. The distribution of leading significant digits. *IMA Journal of Numerical Analysis*, 2(4):407–412, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Turner:1984:FRD

- [2099] Peter R. Turner. Further revelations on l.s.d. *IMA Journal of Numerical Analysis*, 4(2):225–231, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Uschmajew:2020:CPQ

- [2100] André Uschmajew and Bart Vandereycken. On critical points of quadratic low-rank matrix optimization problems. *IMA Journal of Numerical Analysis*, 40(4):2626–2651, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/40/4/2626/5743529>.

Valvi:1987:AID

- [2101] F. N. Valvi and V. S. Geroyannis. Analytic inverses and determinants for a class of matrices. *IMA Journal of Numerical Analysis*, 7(1):123–128, 1987.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

VanBeeumen:2015:LLH

- [2102] Roel Van Beeumen, Wim Michiels, and Karl Meerbergen. Linearization of Lagrange and Hermite interpolating matrix polynomials. *IMA Journal of Numerical Analysis*, 35(2):909–930, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/909>.

Van-Brunt:2022:ASP

- [2103] Alexander Van-Brunt, Patrick E. Farrell, and Charles W. Monroe. Augmented saddle-point formulation of the steady-state Stefan–Maxwell diffusion problem. *IMA Journal of Numerical Analysis*, 42(4):3272–3305, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/42/4/3272/6381969>.

VanDenHeuvel:2001:URC

- [2104] E. G. Van Den Heuvel. Using resolvent conditions to obtain new stability results for θ -methods for delay differential equations. *IMA Journal of Numerical Analysis*, 21(1):421–438, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210421abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210421.pdf.

vanderHouwen:1982:SCM

- [2105] P. J. van der Houwen and B. P. Sommeijer. A special class of multistep Runge–Kutta methods with extended real stability interval. *IMA Journal of Numerical Analysis*, 2(2):183–209, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

vanderHouwen:1983:PCM

- [2106] P. J. van der Houwen and B. P. Sommeijer. Predictor-corrector methods with improved absolute stability regions. *IMA Journal of Numerical Analysis*, 3(4):417–437, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

vanderHouwen:1984:LMM

- [2107] P. J. van der Houwen and B. P. Sommeijer. Linear multistep methods with reduced truncation error for periodic initial value problems. *IMA Journal of Numerical Analysis*, 4(4):479–489, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

vanderHouwen:1987:PCM

- [2108] P. J. van der Houwen and B. P. Sommeijer. Predictor-corrector methods for periodic second-order initial-value problems. *IMA Journal of Numerical Analysis*, 7(4):407–422, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

vanderHouwen:1990:ISP

- [2109] P. J. van der Houwen and B. P. Sommeijer. Improving the stability of predictor-corrector methods by residue

smoothing. *IMA Journal of Numerical Analysis*, 10(3):361–378, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

vanderHouwen:1986:SPC

- [2110] P. J. van der Houwen, B. P. Sommeijer, and Christopher T. H. Baker. On the stability of predictor-corrector methods for parabolic equations with delay. *IMA Journal of Numerical Analysis*, 6(1):1–23, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

vanderHouwen:1981:CSA

- [2111] P. J. van der Houwen, P. H. M. Wolkenfelt, and C. T. H. Baker. Convergence and stability analysis for modified Runge–Kutta methods in the numerical treatment of second-kind Volterra integral equations. *IMA Journal of Numerical Analysis*, 1(3):303–328, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

VanDeun:2006:QFB

- [2112] J. Van Deun and A. Bultheel. A quadrature formula based on Chebyshev rational functions. *IMA Journal of Numerical Analysis*, 26(4):641–656, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/641>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/641>.

vanDiejen:2021:CRH

- [2113] J. F. van Diejen and E. Emsiz. Cubature rules from Hall–Littlewood polynomials. *IMA Journal of Numerical*

Analysis, 41(2):998–1030, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/998/5838512>.

vanDorsseleer:1994:ECS

- [2114] J. L. M. van Dorsseleer and M. N. Spijker. The error committed by stopping the Newton iteration in the numerical solution of stiff initial value problems. *IMA Journal of Numerical Analysis*, 14(2):183–209, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

vanDorsseleer:1999:IMP

- [2115] Jos L. M. van Dorsseleer and Christian Lubich. Inertial manifolds of parabolic differential equations under higher-order discretizations. *IMA Journal of Numerical Analysis*, 19(3):455–471, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190455.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190455.pdf.

Vandereycken:2013:RGC

- [2116] Bart Vandereycken, P.-A. Absil, and Stefan Vandewalle. A Riemannian geometry with complete geodesics for the set of positive semidefinite matrices of fixed rank. *IMA Journal of Numerical Analysis*, 33(2):481–514, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/481.full.pdf+html>.

Vannieuwenhoven:2015:RAT

- [2117] Nick Vannieuwenhoven, Raf Vandebril, and Karl Meerbergen. A randomized algorithm for testing nonsingularity of structured matrices with an application to asserting nondefectivity of Segrè varieties. *IMA Journal of Numerical Analysis*, 35(1):289–324, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/289>.

Varah:1993:EPV

- [2118] J. M. Varah. Errors and perturbations in Vandermonde systems. *IMA Journal of Numerical Analysis*, 13(1):1–12, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Vasconcelos:1998:PIM

- [2119] Paulo B. Vasconcelos and Filomena D. d’Almeida. Preconditioned iterative methods for coupled discretizations of fluid flow problems. *IMA Journal of Numerical Analysis*, 18(3):385–397, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180385.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180385.pdf.

Veesser:2012:PCF

- [2120] Andreas Veesser and Rüdiger Verfürth. Poincaré constants for finite element stars. *IMA Journal of Numerical Analysis*, 32(1):30–47, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/32/1/30.full.pdf+html>.

Vejchodsky:2006:GLC

- [2121] Tomas Vejchodsky. Guaranteed and locally computable a posteriori error estimate. *IMA Journal of Numerical Analysis*, 26(3):525–540, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/525>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/525>.

Verdi:1985:NAH

- [2122] C. Verdi and A. Visintin. Numerical approximation of hysteresis problems. *IMA Journal of Numerical Analysis*, 5(4):447–463, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Verfurth:2022:NHN

- [2123] Barbara Verfurth. Numerical homogenization for nonlinear strongly monotone problems. *IMA Journal of Numerical Analysis*, 42(2):1313–1338, April 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/2/1313/6149432>.

Verfurth:1984:CCG

- [2124] R. Verfurth. A combined conjugate gradient-multigrid algorithm for the numerical solution of the Stokes problem. *IMA Journal of Numerical Analysis*, 4(4):441–455, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Vigo-Aguiar:2007:FSR

- [2125] Jesus Vigo-Aguiar and Higinio Ramos. A family of A -stable Runge–Kutta collocation methods of higher order for initial-value problems. *IMA Journal of Numerical Analysis*, 27(4):798–817, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/798>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/798>.

Viscor:2013:RFD

- [2126] Martin Viscor and Martin Stynes. A robust finite difference method for a singularly perturbed degenerate parabolic problem II. *IMA Journal of Numerical Analysis*, 33(2):460–480, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/460.full.pdf+html>.

Viswanath:2001:GEN

- [2127] Divakar Viswanath. Global errors of numerical ODE solvers and Lyapunov’s theory of stability. *IMA Journal of Numerical Analysis*, 21(1):387–406, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210387abs.pdf; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210387.pdf.

Voller:1985:IFD

- [2128] V. R. Voller. Implicit finite-difference solutions of the enthalpy formulation of

Stefan problems. *IMA Journal of Numerical Analysis*, 5(2):201–214, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

vonWahl:2022:UEF

- [2129] Henry von Wahl, Thomas Richter, and Christoph Lehrenfeld. An unfitted Eulerian finite element method for the time-dependent Stokes problem on moving domains. *IMA Journal of Numerical Analysis*, 42(3):2505–2544, July 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/3/2505/6307433>.

Vulanovic:2001:PMS

- [2130] Relja Vulanović. A priori meshes for singularly perturbed quasilinear two-point boundary value problems. *IMA Journal of Numerical Analysis*, 21(1):349–366, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210349.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210349.pdf.

Walker:2022:KPE

- [2131] Shawn W. Walker. The Kirchhoff plate equation on surfaces: the surface Hellan–Herrmann–Johnson method. *IMA Journal of Numerical Analysis*, 42(4):3094–3134, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3094/6354854>.

Walloth:2020:RTP

- [2132] Mirjam Walloth. Residual-type a posteriori error estimator for a quasi-static Signorini contact problem. *IMA Journal of Numerical Analysis*, 40(3):1937–1971, July 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/3/1937/5485005>.

Walz:1989:EBS

- [2133] Guido Walz. Error bounds and stopping rules for extrapolation methods. *IMA Journal of Numerical Analysis*, 9(2):185–198, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Wang:2019:FAE

- [2134] Bin Wang and Xinyuan Wu. The formulation and analysis of energy-preserving schemes for solving high-dimensional nonlinear Klein–Gordon equations. *IMA Journal of Numerical Analysis*, 39(4):2016–2044, October 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/4/2016/5055152>.

Wang:2011:DGM

- [2135] Fei Wang, Weimin Han, and Xiaoliang Cheng. Discontinuous Galerkin methods for solving the Signorini problem. *IMA Journal of Numerical Analysis*, 31(4):1754–1772, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1754.full.pdf+html>.

Wang:2020:VEM

- [2136] Fei Wang and Huayi Wei. Virtual element methods for the obstacle problem. *IMA Journal of Numerical Analysis*, 40(1):708–728, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/708/5068727>.

Wang:2021:CNV

- [2137] Fei Wang and Jikun Zhao. Conforming and nonconforming virtual element methods for a Kirchhoff plate contact problem. *IMA Journal of Numerical Analysis*, 41(2):1496–1521, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1496/5821104>.

Wang:2022:EPE

- [2138] Gang Wang, Jian Meng, Ying Wang, and Liqun Mei. *A priori* and *a posteriori* error estimates for a virtual element method for the non-self-adjoint Steklov eigenvalue problem. *IMA Journal of Numerical Analysis*, 42(4):3675–3710, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3675/6414410>.

Wang:2023:ORC

- [2139] Haiyong Wang. Optimal rates of convergence and error localization of Gegenbauer projections. *IMA Journal of Numerical Analysis*, 43(4):2413–2444, July 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/4/2413/6674192>.

academic.oup.com/imajna/article/43/4/2413/6674192.

Wang:2017:FAC

- [2140] Haiyong Wang and Daan Huybrechs. Fast and accurate computation of Chebyshev coefficients in the complex plane. *IMA Journal of Numerical Analysis*, 37(3):1150–1174, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1150/2670030/Fast-and-accurate-computation-of-Chebyshev>.

Wang:2011:AEF

- [2141] Haiyong Wang and Shuhuang Xiang. Asymptotic expansion and Filon-type methods for a Volterra integral equation with a highly oscillatory kernel. *IMA Journal of Numerical Analysis*, 31(2):469–490, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/469.full.pdf+html>.

Wang:1995:ELL

- [2142] Hong Wang, Richard E. Ewing, and Thomas F. Russell. Eulerian–Lagrangian localized adjoint methods for convection-diffusion equations and their convergence analysis. *IMA Journal of Numerical Analysis*, 15(3):405–459, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Wang:2024:SCA

- [2143] Jihong Wang, Jerry Zhijian Yang, and Jiwei Zhang. Stability and convergence analysis of high-order numeri-

cal schemes with DtN-type absorbing boundary conditions for nonlocal wave equations. *IMA Journal of Numerical Analysis*, 44(1):604–632, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/604/7099186>.

Wang:2011:KTN

- [2144] Jin-Hua Wang and Chong Li. Kantorovich’s theorems for Newton’s method for mappings and optimization problems on Lie groups. *IMA Journal of Numerical Analysis*, 31(1):322–347, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/322.full.pdf+html>.

Wang:2011:UEF

- [2145] Kaixin Wang and Hong Wang. Uniform estimates for a family of Eulerian–Lagrangian methods for time-dependent convection–diffusion equations with degenerate diffusion. *IMA Journal of Numerical Analysis*, 31(3):1006–1037, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1006.full.pdf+html>.

Wang:2025:LIF

- [2146] Mengchao Wang and Xiaojie Wang. A linearly implicit finite element full-discretization scheme for SPDEs with nonglobally Lipschitz coefficients. *IMA Journal of Numerical Analysis*, 45(1):516–579, January 2025. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/1/516/7666613>.

Wang:2023:CPB

- [2147] Nana Wang and Jicheng Li. A class of preconditioners based on symmetric-triangular decomposition and matrix splitting for generalized saddle point problems. *IMA Journal of Numerical Analysis*, 43(5):2998–3025, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2998/6768220>.

Wang:1998:CEB

- [2148] S. Wang, I. H. Sloan, and D. W. Kelly. Computable error bounds for pointwise derivatives of a Neumann problem. *IMA Journal of Numerical Analysis*, 18(2):251–271, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180251.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180251.pdf.

Wang:2004:NFF

- [2149] Song Wang. A novel fitted finite volume method for the Black–Scholes equation governing option pricing. *IMA Journal of Numerical Analysis*, 24(4):699–720, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/699>; <http://imanum.oupjournals.org/cgi/reprint/24/4/699>.

Wang:2024:CFC

- [2150] Weiqi Wang and Simone Brugiapaglia. Compressive Fourier collocation methods for high-dimensional diffusion equations with periodic boundary conditions. *IMA Journal of Numerical Analysis*, 44(6):3780–3814, November 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/6/3780/7517280>.

Wang:2017:SCR

- [2151] Xiaojie Wang. Strong convergence rates of the linear implicit Euler method for the finite element discretization of SPDEs with additive noise. *IMA Journal of Numerical Analysis*, 37(2):965–984, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/965/2669957/Strong-convergence-rates-of-the-linear-implicit>.

Wang:2024:WEA

- [2152] Xiaojie Wang, Yuying Zhao, and Zhongqiang Zhang. Weak error analysis for strong approximation schemes of SDEs with super-linear coefficients. *IMA Journal of Numerical Analysis*, 44(5):3153–3185, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/3153/7379741>.

Wang:2007:BBP

- [2153] Xiaoqun Wang and Ian H. Sloan. Brownian bridge and principal component analysis: towards removing the

curse of dimensionality. *IMA Journal of Numerical Analysis*, 27(4):631–654, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/631>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/631>.

Wang:2000:CNM

- [2154] Xinghua Wang. Convergence of Newton’s method and uniqueness of the solution of equations in Banach space. *IMA Journal of Numerical Analysis*, 20(1):123–134, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200123.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200123.pdf.

Wang:1996:CPA

- [2155] Xinmin Wang. Convergence of parallel AOR and GAOR methods applied to H -matrices. *IMA Journal of Numerical Analysis*, 16(4):485–499, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160485.sgm.abs.html.

Wang:2021:PAH

- [2156] Yangshuai Wang, Lei Zhang, and Hao Wang. A priori analysis of a higher-order nonlinear elasticity model for an atomistic chain with periodic boundary condition. *IMA Journal of Numerical Analysis*, 41(2):1465–1495, April 2021. CODEN IJNADH. ISSN 0272-4979

(print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1465/5837821>.

Wang:2018:EIB

- [2157] Zhengyu Wang and Xiaojun Chen. An exponential integrator-based discontinuous Galerkin method for linear complementarity systems. *IMA Journal of Numerical Analysis*, 38(4):2145–2165, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2145/4554435>.

Wang:2011:CEB

- [2158] Zhengyu Wang and Ya xiang Yuan. Componentwise error bounds for linear complementarity problems. *IMA Journal of Numerical Analysis*, 31(1):348–357, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/348.full.pdf+html>.

Wang:2015:GLA

- [2159] Zhong-Qing Wang and Xin-Min Xiang. Generalized Laguerre approximations and spectral method for the Camassa–Holm equation. *IMA Journal of Numerical Analysis*, 35(3):1456–1482, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1456>.

Wathen:1987:REB

- [2160] A. J. Wathen. Realistic eigenvalue bounds for the Galerkin mass matrix. *IMA Journal of Numerical Anal-*

ysis, 7(4):449–457, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Wathen:1985:SMF

- [2161] A. J. Wathen and M. J. Baines. On the structure of the moving finite-element equations. *IMA Journal of Numerical Analysis*, 5(2):161–182, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Watson:1981:ALA

- [2162] G. A. Watson. An algorithm for linear L_1 approximation of continuous functions. *IMA Journal of Numerical Analysis*, 1(2):157–167, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Watson:1982:NML

- [2163] G. A. Watson. Numerical methods for linear orthogonal L_p approximation. *IMA Journal of Numerical Analysis*, 2(3):275–287, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Watson:1984:DAR

- [2164] G. A. Watson. Discrete l_1 approximation by rational functions. *IMA Journal of Numerical Analysis*, 4(3):275–288, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Watson:1988:MCS

- [2165] G. A. Watson. A method for the Chebyshev solution of an overdetermined system of complex linear equations. *IMA Journal of Numerical Analysis*, 8(4):461–471, October 1988.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Watson:1988:SPS

- [2166] G. A. Watson. The smallest perturbation of a submatrix that lowers the rank of the matrix. *IMA Journal of Numerical Analysis*, 8(3):295–303, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Watson:1990:CAD

- [2167] G. A. Watson. Chebyshev approximation to data by positive sums of exponentials. *IMA Journal of Numerical Analysis*, 10(4):569–582, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Watson:1991:AOS

- [2168] G. A. Watson. An algorithm for optimal l_2 scaling of matrices. *IMA Journal of Numerical Analysis*, 11(4):481–492, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Watson:2002:GNM

- [2169] G. A. Watson. On the Gauss–Newton method for l_1 orthogonal distance regression. *IMA Journal of Numerical Analysis*, 22(3):345–357, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220345.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220345.pdf.

Weber:2017:CRF

- [2170] Franziska Weber. Convergence rates of finite difference schemes for the linear advection and wave equation

with rough coefficient. *IMA Journal of Numerical Analysis*, 37(3):1586–1634, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1586/2670057/Convergence-rates-of-finite-difference-schemes-for>.

Weber:2022:PFN

- [2171] Melanie Weber and Suvrit Sra. Projection-free nonconvex stochastic optimization on Riemannian manifolds. *IMA Journal of Numerical Analysis*, 42(4):3241–3271, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3241/6374894>.

Weideman:2010:ICI

- [2172] J. A. C. Weideman. Improved contour integral methods for parabolic PDEs. *IMA Journal of Numerical Analysis*, 30(1):334–350, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/334>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/334>.

Weiner:1993:PSR

- [2173] R. Weiner, M. Arnold, P. Rentrop, and K. Strehmel. Partitioning strategies in Runge–Kutta type methods. *IMA Journal of Numerical Analysis*, 13(2):303–319, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Wendland:2001:LPR

- [2174] Holger Wendland. Local polynomial reproduction and moving least squares approximation. *IMA Journal of Numerical Analysis*, 21(1):285–300, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210285.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210285.pdf.

Wenzel:2025:SCR

- [2175] Tizian Wenzel, Gabriele Santin, and Bernard Haasdonk. Stability of convergence rates: kernel interpolation on non-Lipschitz domains. *IMA Journal of Numerical Analysis*, 45(2):777–798, March 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/45/2/777/7665456>.

Wesseling:1996:NSC

- [2176] P. Wesseling. von Neumann stability conditions for the convection-diffusion equation. *IMA Journal of Numerical Analysis*, 16(4):583–598, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160583.sgm.abs.html.

Wihler:2004:LFD

- [2177] Journal Thomas P. Wihler. Locking-free DGFEM for elasticity problems in polygons. *IMA Journal of Numerical Analysis*, 24(1):45–75, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240045.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240045.pdf.

Williams:1993:BCA

- [2178] Jack Williams and Z. Kalogiratou. Best Chebyshev approximation from families of ordinary differential equations. *IMA Journal of Numerical Analysis*, 13(3):383–395, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Wnuk:2023:RSG

- [2179] M. Wnuk and M. Gnewuch. Randomized sparse grid algorithms for multivariate integration on Haar wavelet spaces. *IMA Journal of Numerical Analysis*, 43(1):73–98, January 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/1/73/6449110>.

Wolkenfelt:1982:CRQ

- [2180] P. H. M. Wolkenfelt. The construction of reducible quadrature rules for Volterra integral and integro-differential equations. *IMA Journal of Numerical Analysis*, 2(2):131–152, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Wright:1984:APC

- [2181] K. Wright. Asymptotic properties of collocation matrix norms. 1. Global polynomial approximation. *IMA Journal of Numerical Analysis*, 4(2):185–202, April 1984. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic).

Wright:1991:MSC

- [2182] K. Wright, A. H.-A. Ahmed, and A. H. Seleman. Mesh selection in collocation for boundary value problems. *IMA Journal of Numerical Analysis*, 11(1):7–20, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Wright:1986:CPH

- [2183] Stephen J. Wright. Convergence of projected Hessian approximations in quasi-Newton methods for the nonlinear programming problem. *IMA Journal of Numerical Analysis*, 6(4):463–474, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Wright:1990:CIA

- [2184] Stephen J. Wright. Convergence of an inexact algorithm for composite nonsmooth optimization. *IMA Journal of Numerical Analysis*, 10(3):299–321, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Wright:2002:PRM

- [2185] Thomas G. Wright and Lloyd N. Trefethen. Pseudospectra of rectangular matrices. *IMA Journal of Numerical Analysis*, 22(4):501–519, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220501.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220501.pdf.

Wu:2016:FMR

- [2186] Bin Wu and Qinghui Zhang. Fast multiscale regularization methods for high-order numerical differentiation. *IMA Journal of Numerical Analysis*, 36(3):1432–1451, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1432>.

Wu:2018:NAA

- [2187] Gang Wu and Lu Zhang. New algorithms for approximating φ -functions and their condition numbers for large sparse matrices. *IMA Journal of Numerical Analysis*, 38(3):1185–1208, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1185/4082173>.

Wu:2014:PAE

- [2188] Haijun Wu. Pre-asymptotic error analysis of CIP-FEM and FEM for the Helmholtz equation with high wave number. Part I: linear version. *IMA Journal of Numerical Analysis*, 34(3):1266–1288, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1266>.

Wu:2009:EEA

- [2189] Haijun Wu and Zhimin Zhang. Enhancing eigenvalue approximation by gradient recovery on adaptive meshes. *IMA Journal of Numerical Analysis*, 29(4):1008–1022, Oc-

- tober 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/1008>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/1008>.
- Wu:2005:SRS**
- [2190] Jiming Wu and Yong Lü. A superconvergence result for the second-order Newton–Cotes formula for certain finite-part integrals. *IMA Journal of Numerical Analysis*, 25(2):253–263, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/253>; <http://imanum.oupjournals.org/cgi/reprint/25/2/253>.
- Wu:2015:CAS**
- [2191] Shu-Lin Wu. Convergence analysis of some second-order parareal algorithms. *IMA Journal of Numerical Analysis*, 35(3):1315–1341, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1315>.
- Wu:2012:CAO**
- [2192] Shu-Lin Wu, Cheng-Ming Huang, and Ting-Zhu Huang. Convergence analysis of the overlapping Schwarz waveform relaxation algorithm for reaction-diffusion equations with time delay. *IMA Journal of Numerical Analysis*, 32(2):632–671, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/632.full.pdf+html>.
- Wu:1994:SSH**
- [2193] W. Wu, A. Spence, and K. A. Cliffe. Steady-state/Hopf mode interaction at a symmetry-breaking Takens–Bogdanov point. *IMA Journal of Numerical Analysis*, 14(1):137–160, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Wu:2022:OCS**
- [2194] Yifei Wu and Xiaofei Zhao. Optimal convergence of a second-order low-regularity integrator for the KdV equation. *IMA Journal of Numerical Analysis*, 42(4):3499–3528, October 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/4/3499/6321763>.
- Wu:2012:CAC**
- [2195] Yongke Wu, Long Chen, Xiaoping Xie, and Jinchao Xu. Convergence analysis of V -cycle multigrid methods for anisotropic elliptic equations. *IMA Journal of Numerical Analysis*, 32(4):1329–1347, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1329.full.pdf+html>.
- Wu:1993:LEE**
- [2196] Zong Min Wu and Robert Schaback. Local error estimates for radial basis function interpolation of scattered data. *IMA Journal of Numerical Analysis*, 13(1):13–27, 1993. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Wyns:2017:CAM

- [2197] Maarten Wyns. Convergence analysis of the Modified Craig–Sneyd scheme for two-dimensional convection-diffusion equations with nonsmooth initial data. *IMA Journal of Numerical Analysis*, 37(2):798–831, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/798/2669993/Convergence-analysis-of-the-Modified-Craig-Sneyd>.

Xi:2020:MLM

- [2198] Yingxia Xi, Xia Ji, and Shuo Zhang. A multi-level mixed element scheme of the two-dimensional Helmholtz transmission eigenvalue problem. *IMA Journal of Numerical Analysis*, 40(1):686–707, January 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/1/686/5144482>.

Xia:2015:HDF

- [2199] Bingxing Xia and Viet Ha Hoang. High-dimensional finite element method for multiscale linear elasticity. *IMA Journal of Numerical Analysis*, 35(3):1277–1314, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1277>.

Xiang:2011:CCF

- [2200] Shuhuang Xiang, Yeol Je Cho, Haiyong Wang, and Hermann Brunner.

Clenshaw–Curtis–Filon-type methods for highly oscillatory Bessel transforms and applications. *IMA Journal of Numerical Analysis*, 31(4):1281–1314, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1281.full.pdf+html>. See erratum [2201].

Xiang:2013:ECC

- [2201] Shuhuang Xiang, Yeol Je Cho, Haiyong Wang, and Hermann Brunner. Erratum to “Clenshaw–Curtis–Filon-type methods for highly oscillatory Bessel transforms and applications” (*IMA Journal of Numerical Analysis* (2011) **31**:1281–1314). *IMA Journal of Numerical Analysis*, 33(4):1480–1483, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1480.full.pdf+html>. See [2200].

Xie:2010:SEP

- [2202] Gang Xie and Thomas P.-Y. Yu. Smoothness equivalence properties of interpolatory Lie group subdivision schemes. *IMA Journal of Numerical Analysis*, 30(3):731–750, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/731>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/731>.

Xie:2012:AOE

- [2203] Gang Xie and Thomas P.-Y. Yu. Approximation order equivalence prop-

- erties of manifold-valued data subdivision schemes. *IMA Journal of Numerical Analysis*, 32(2):687–700, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/687.full.pdf+html>.
- Xie:2014:TMM**
- [2204] Hehu Xie. A type of multilevel method for the Steklov eigenvalue problem. *IMA Journal of Numerical Analysis*, 34(2):592–608, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/592.full.pdf+html>.
- Xie:2024:CCO**
- [2205] Yuchen Xie, Raghu Bollapragada, Richard Byrd, and Jorge Nocedal. Constrained and composite optimization via adaptive sampling methods. *IMA Journal of Numerical Analysis*, 44(2):680–709, March 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/2/680/7158521>.
- Xie:2005:ISE**
- [2206] Ziqing Xie, Chuanmiao Chen, and Yun Xu. An improved search-extension method for computing multiple solutions of semilinear PDEs. *IMA Journal of Numerical Analysis*, 25(3):549–576, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/549>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/549>.
- Xu:2011:UBS**
- [2207] Da Xu. Uniform l_1 behaviour in a second-order difference-type method for a linear Volterra equation with completely monotonic kernel I: stability. *IMA Journal of Numerical Analysis*, 31(3):1154–1180, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1154.full.pdf+html>.
- Xu:2022:ACN**
- [2208] Da Xu. Application of the Crank–Nicolson time integrator to viscoelastic wave equations with boundary feedback damping. *IMA Journal of Numerical Analysis*, 42(1):487–514, January 2022. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/42/1/487/5923272>.
- Xu:2004:TLA**
- [2209] Journal Xuejun Xu, S. H. Lui, and T. Rahman. A two-level additive Schwarz method for the Morley non-conforming element approximation of a nonlinear biharmonic equation. *IMA Journal of Numerical Analysis*, 24(1):97–122, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240097.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240097.pdf.

Xu:2016:ECR

- [2210] Kuan Xu and Nicholas Hale. Explicit construction of rectangular differentiation matrices. *IMA Journal of Numerical Analysis*, 36(2):618–632, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/618>.

Xu:2011:CBA

- [2211] X. Xu, W. Huang, R. D. Russell, and J. F. Williams. Convergence of de Boor’s algorithm for the generation of equidistributing meshes. *IMA Journal of Numerical Analysis*, 31(2):580–596, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/580.full.pdf+html>.

Yalamov:1999:SPA

- [2212] Plamen Y. Yalamov and Marcin Pa-przycki. Stability and performance analysis of a block elimination solver for bordered linear systems. *IMA Journal of Numerical Analysis*, 19(3):335–348, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190335.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190335.pdf.

Yan:1990:CCV

- [2213] Yi Yan. Cosine change of variable for Symm’s integral equation on open arcs. *IMA Journal of Numerical Analysis*, 10(4):521–535, 1990. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Yan:2003:SPA

- [2214] Yubin Yan. Smoothing properties and approximation of time derivatives for parabolic equations: constant time steps. *IMA Journal of Numerical Analysis*, 23(3):465–487, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/drg002.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg002.pdf.

Yang:1996:PIN

- [2215] Daoqi Yang. A parallel iterative nonoverlapping domain decomposition procedure for elliptic problems. *IMA Journal of Numerical Analysis*, 16(1):75–91, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160075.sgm.abs.html.

Yang:1999:IPM

- [2216] Daoqi Yang. An iterative perturbation method for saddle point problems. *IMA Journal of Numerical Analysis*, 19(2):215–231, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190215.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190215.pdf.

Yang:2011:QFV

- [2217] Min Yang and Jiangguo Liu. A quadratic finite volume element

method for parabolic problems on quadrilateral meshes. *IMA Journal of Numerical Analysis*, 31(3):1038–1061, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1038.full.pdf+html>.

Yang:2013:QFV

- [2218] Min Yang, Jianguo Liu, and Yanping Lin. Quadratic finite-volume methods for elliptic and parabolic problems on quadrilateral meshes: optimal-order errors based on Barlow points. *IMA Journal of Numerical Analysis*, 33(4):1342–1364, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1342.full.pdf+html>.

Yang:2016:UAH

- [2219] Min Yang, Jianguo Liu, and Qingsong Zou. Unified analysis of higher-order finite volume methods for parabolic problems on quadrilateral meshes. *IMA Journal of Numerical Analysis*, 36(2):872–896, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/872>.

Yao:2023:INC

- [2220] Zhewei Yao, Peng Xu, Fred Roosta, Stephen J Wright, and Michael W Mahoney. Inexact Newton-CG algorithms with complexity guarantees. *IMA Journal of Numerical Analysis*, 43(3):1855–1897, May 2023. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/3/1855/6670031>.

Ye:2024:EAT

- [2221] Xuda Ye and Zhennan Zhou. Error analysis of time-discrete random batch method for interacting particle systems and associated mean-field limits. *IMA Journal of Numerical Analysis*, 44(3):1660–1698, May 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/3/1660/7203656>.

Yi:2024:EEH

- [2222] Su-Cheol Yi, Kai Fu, and Shusen Xie. Error estimates of high-order compact finite difference schemes for the nonlinear $abcd$ systems. *IMA Journal of Numerical Analysis*, 44(5):2959–2996, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2959/7263245>.

Yi:2020:OEE

- [2223] Wenfan Yi and Yongyong Cai. Optimal error estimates of finite difference time domain methods for the Klein–Gordon–Dirac system. *IMA Journal of Numerical Analysis*, 40(2):1266–1293, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1266/5228146>.

Yoshikawa:2017:EES

- [2224] Shuji Yoshikawa. An error estimate for structure-preserving fi-

- nite difference scheme for the Falk model system of shape memory alloys. *IMA Journal of Numerical Analysis*, 37(1):477–504, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/477/2669932/An-error-estimate-for-structure-preserving-finite>.
- Ypma:1983:ERE**
- [2225] T. J. Ypma. The effect of rounding errors on Newtonlike methods. *IMA Journal of Numerical Analysis*, 3(1):109–118, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Yu:2024:NSA**
- [2226] Yi Yu, Maksymilian Dryja, and Marcus Sarkis. Nonoverlapping spectral additive Schwarz methods for hybrid discontinuous Galerkin discretizations. *IMA Journal of Numerical Analysis*, 44(1):192–224, January 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/1/192/7044786>.
- Yuan:1984:EOL**
- [2227] Y. Yuan. An example of only linear convergence of trust region algorithms for nonsmooth optimization. *IMA Journal of Numerical Analysis*, 4(3):327–335, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Yuan:1984:LOC**
- [2228] Y. Yuan. On the least Q -order of convergence of variable metric algorithms. *IMA Journal of Numerical Analysis*, 4(2):233–239, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Yuan:1991:MBA**
- [2229] Ya Xiang Yuan. A modified BFGS algorithm for unconstrained optimization. *IMA Journal of Numerical Analysis*, 11(3):325–332, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Yun:2019:UCM**
- [2230] Xiaofan Yun, Chenxiang Qin, Jinbiao Wu, and Hui Zheng. Uniform convergence of a multigrid method for elliptic equations with anisotropic coefficients. *IMA Journal of Numerical Analysis*, 39(2):1058–1084, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/1058/4972989>.
- Zakerzadeh:2016:HOA**
- [2231] Hamed Zakerzadeh and Ulrik S. Fjordholm. High-order accurate, fully discrete entropy stable schemes for scalar conservation laws. *IMA Journal of Numerical Analysis*, 36(2):633–654, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/633>.
- Zanna:2015:EVP**
- [2232] Antonella Zanna. Explicit volume-preserving splitting methods for divergence-free ODEs by tensor-product basis decompositions. *IMA Journal of Numerical Analysis*, 35

- (1):89–106, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/89>.
- Zhang:2004:SAR**
- [2233] Chengjian Zhang and Stefan Vandewalle. Stability analysis of Runge–Kutta methods for nonlinear Volterra delay-integro-differential equations. *IMA Journal of Numerical Analysis*, 24(2):193–214, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240193.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240193.pdf.
- Zhang:2012:CAM**
- [2234] Lei-Hong Zhang and Moody T. Chu. Computing absolute maximum correlation. *IMA Journal of Numerical Analysis*, 32(1):163–184, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/163.full.pdf+html>.
- Zhang:2006:DMP**
- [2235] Li Zhang, Weijun Zhou, and Dong-Hui Li. A descent modified Polak–Ribière–Polyak conjugate gradient method and its global convergence. *IMA Journal of Numerical Analysis*, 26(4):629–640, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/629>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/629>.
- Zhang:2024:LEB**
- [2236] Lu Zhang. A local energy-based discontinuous Galerkin method for fourth-order semilinear wave equations. *IMA Journal of Numerical Analysis*, 44(5):2793–2820, September 2024. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/44/5/2793/7317722>.
- Zhang:1996:CVM**
- [2237] Pingwen Zhang. Convergence of vortex methods in a bounded domain using linear finite elements. *IMA Journal of Numerical Analysis*, 16(4):539–548, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160539.sgm.abs.html.
- Zhang:2020:MCF**
- [2238] Shuo Zhang. Minimal consistent finite element space for the biharmonic equation on quadrilateral grids. *IMA Journal of Numerical Analysis*, 40(2):1390–1406, April 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/2/1390/5298866>.
- Zhang:1987:LCU**
- [2239] Yin Zhang and R. P. Tewarson. Least-change updates to Cholesky factors subject to the nonlinear quasi-Newton condition. *IMA Journal of Numerical Analysis*, 7(4):509–521, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Zhang:1988:QNA

- [2240] Yin Zhang and R. P. Tewarson. Quasi-Newton algorithms with updates from the preconvex part of Broyden's family. *IMA Journal of Numerical Analysis*, 8(4):487–509, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Zhang:2001:SDR

- [2241] Zhimin Zhang, Ningning Yan, and Tong Sun. Superconvergent derivative recovery for the intermediate finite element family of the second type. *IMA Journal of Numerical Analysis*, 21(3):643–665, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210643.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210643.pdf.

Zhao:2023:LFS

- [2242] Lina Zhao, Eric Chung, and Eun-Jae Park. A locking-free staggered DG method for the Biot system of poroelasticity on general polygonal meshes. *IMA Journal of Numerical Analysis*, 43(5):2777–2816, September 2023. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/43/5/2777/6706612>.

Zhao:2020:LOS

- [2243] Lina Zhao and Eun-Jae Park. A lowest-order staggered DG method for the coupled Stokes–Darcy problem. *IMA Journal of Numerical Analysis*, 40(4):2871–2897, October 2020. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/40/4/2871/5716162>.

Zhao:1993:UTO

- [2244] Ning Zhao and Jia Zun Dai. Uniformly third-order accurate TVNE interpolations. *IMA Journal of Numerical Analysis*, 13(2):255–261, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Zhao:2021:ESP

- [2245] Quan Zhao, Wei Jiang, and Weizhu Bao. An energy-stable parametric finite element method for simulating solid-state dewetting. *IMA Journal of Numerical Analysis*, 41(3):2026–2055, July 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/3/2026/5919159>.

Zheng:2021:FAT

- [2246] Chunxiong Zheng and Xiang Ma. Fast algorithm for the three-dimensional Poisson equation in infinite domains. *IMA Journal of Numerical Analysis*, 41(4):3024–3045, October 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/4/3024/5896489>.

Zheng:2015:CAM

- [2247] Hui Zheng and Jinbiao Wu. Convergence analysis on multigrid methods for elliptic problems with large jumps in coefficients. *IMA Journal of Numerical Analysis*, 35(4):1888–1912, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1888>.

Zheng:2021:OOE

- [2248] Xiangcheng Zheng and Hong Wang. Optimal-order error estimates of finite element approximations to variable-order time-fractional diffusion equations without regularity assumptions of the true solutions. *IMA Journal of Numerical Analysis*, 41(2):1522–1545, April 2021. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/41/2/1522/5825557>.

Zhou:2005:CNS

- [2249] Jiansong Zhou and Zhiping Li. Computing non-smooth minimizers with the mesh transformation method. *IMA Journal of Numerical Analysis*, 25(3):458–472, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/458>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/458>.

Zhu:2011:RPE

- [2250] Liang Zhu and Dominik Schötzau. A robust a posteriori error estimate for hp adaptive DG methods for convection–diffusion equations. *IMA Journal of Numerical Analysis*, 31(3):971–1005, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/971.full.pdf+html>.

Zietak:1983:PMS

- [2251] K. Ziętak. The properties of the min-max solution of a nonlinear matrix equation $XY = A$. *IMA Journal of Numerical Analysis*, 3(2):229–244, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Zietak:1987:PSL

- [2252] K. Ziętak. Properties of the l_1 -solutions of the linear matrix equation $AX + YB = C$. *IMA Journal of Numerical Analysis*, 7(2):223–233, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Zietak:1989:PAM

- [2253] K. Ziętak. Properties of the approximations of a matrix which lower its rank. *IMA Journal of Numerical Analysis*, 9(4):545–554, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Zubik-Kowal:1997:MLP

- [2254] Barbara Zubik-Kowal. The method of lines for parabolic differential-functional equations. *IMA Journal of Numerical Analysis*, 17(1):103–123, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170103.sgm.abs.html.

Zvan:2001:FVA

- [2255] R. Zvan, P. A. Forsyth, and K. R. Vetzal. A finite volume approach for contingent claims valuation. *IMA Journal of Numerical Analysis*, 21(3):703–731, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-

3642 (electronic). URL http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210703.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210703.pdf.