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/

06 October 2025
Version 1.109

Title word cross-reference

(k, l) [493, 494]. -1 [1531]. 1 [545, 567, 628, 1479, 1655]. $1/2$ [694]. $1/x$ [414]. 10 [1210]. 2 [651, 1022, 1469, 1683]. 3 [89, 278, 396, 910, 1346, 1534, 1678, 1846, 2012]. 3/4 [1790]. 4 [60]. $[1, \infty)$ [414]. $^{1/2}$ [787]. ^{2} [1284, 1297]. A [1357, 2170]. α [1971]. ap [1831]. $AX + YB = C$ [2303]. B [1213]. $\mathbf{R}^3$ [1426]. C^0 [325, 434, 602, 817, 822, 1563]. C^1 [1777, 1914, 2066, 2192]. C^2 [775, 1918, 1678]. C_1 [1820]. $\mathcal{F}$ [755]. $\mathcal{Z}$ [685]. χ [11]. D [192, 245, 2037]. DG(p) [1257]. $dG(s)$ [1064]. ϵ [126, 127, 1256, 2104]. G^1 [963]. G^2 [963]. γ [1560]. H [1304, 1900, 1923, 2202, 749, 759, 1267, 2076]. $H(\text{curl})$ [1226]. $H(\text{curl}; \Omega)$ [1589]. $H(\text{div})$ [924, 1227, 1203, 1535, 1798, 1799]. $H(\text{div}; \Omega)$ [1589]. H^{-1} [927]. H^1 [20, 55, 735, 1062, 1509, 1819, 1860, 2134]. H^2 [381, 617, 735]. $H^s(0, L)$ [217]. H_1 [906]. H_∞ [1762]. $H_p^\Lambda(I^d)$ [1078]. hp [35, 327, 525, 885, 1206, 1306, 1726, 1729, 2132, 2301, 787, 1085, 1083, 1796]. K [975, 756]. l [719]. $L(L^2)$ [813]. L^2 [55, 225, 437, 536, 841, 1173, 1598, 1601]. $L^2(H^1)$ [925]. $L^2(H^1_\gamma)$ [1387]. L^∞ [811]. $L^\infty(I; L^2(\Omega)^d)$ [272]. $L^\infty(L^2)$ [1082, 2100]. $L^\infty(L^\infty)$ [1257, 1258]. L^p [1071, 1239]. L^q [2103]. L_1 [1401, 2209, 1885, 1906, 2211, 2216, 2255, 2303]. L_2 [511, 1062, 1508, 705, 2215]. l_∞ [1906]. L_p [1537, 1693, 1694, 2210]. λ [1090]. LDL^T [1947, 1118, 755]. LR [1199]. LU [72, 1277, 1382, 1435, 2080]. M [657, 656, 1192]. $\mathbf{A} - \varphi$ [697]. $\mathbf{T} - \Omega$ [697]. $\mathcal{H}$ [971]. $\mathcal{O}(\varepsilon^{-3/2})$ [713]. P [590, 591, 671, 1375,

90, 277, 319, 328, 426, 795, 998, 1225, 1258, 1267, 1538, 1577, 1673, 1968, 2000, 2076]. $p(\cdot)$ [318]. $p(x)$ [772]. P_0 [1618]. P_1 [435, 891]. Q [2276, 1876]. qd [1199]. QR [570, 1320]. QZ [1701]. R [711]. R^2 [2007]. R^3 [1711]. R^d [863]. $\Re$ [1267]. rp [1831]. S [1012]. T [1041]. Θ [562, 1184, 1183, 1441, 1615, 1630, 2149]. V [2243]. φ [2235]. ϑ [1440]. $W(a, x)$ [1097]. $W^{-1,q}$ [355]. $W^{1,\infty}$ [762]. X [478, 1689, 2056]. $x^{(i+1)} = Px^{(i)} + q$ [149]. $XY = A$ [2302]. $y'' = f(t, y)$ [590, 591]. $y' = f(x, y)$ [670]. $y' = f(x, y)$ [671]. $y'' = f(x,\ y)$ [1210]. $y'' = f(x, y)$ [668, 669]. z [464, 1692, 1856]. z^{-1} [464, 1692, 1856]. Z_2 [1378]. $|\epsilon|$ [1]. $|L^2|$ [329].

-acceptability [1357]. **-algebraic** [493, 494]. **-algorithm** [2104]. **-approximation** [787, 1537]. **-approximations** [1441]. **-BEM** [328]. **-Bernstein** [1876]. **-boundedness** [1258, 1257]. **-bounds** [811]. **-condition** [1560]. **-conforming** [1580, 1023, 1227, 1535]. **-continuous** [2192]. **-convergence** [762, 975, 1239]. **-Cycle** [2243]. **-decompositions** [657, 656, 1435]. **-dependent** [126]. **-elliptic** [1304, 749, 1226]. **-error** [813, 1082, 2103]. **-factorization** [755]. **-functions** [2235]. **-Galerkin** [1860]. **-Hessian** [1022]. **-hybrid** [822]. **-interior** [434, 817]. **-Laplacian** [90, 277, 426, 772, 1538]. **-linear** [711]. **-matrices** [381, 2202]. **-matrix** [971, 1041, 1192]. **-method** [11]. **-methods** [1615, 1630, 2149, 562, 1184, 1183]. **-narrow** [759]. **-Navier** [318]. **-norm** [998, 617, 1173]. **-norms** [1968, 925]. **-order** [2276]. **-part** [756]. **-partitions** [192]. **-projection** [20, 55, 1062]. **-rational** [1090]. **-scheme** [1440]. **-series** [1213]. **-solutions** [1258, 2303]. **-spline** [1689, 2056]. **-splines** [478, 1820]. **-stability** [55, 671, 1062]. **-stable** [591, 590, 1375, 2170]. **-stochastic** [127]. **-structure** [319, 795, 1673]. **-symmetry** [1378]. **-transform** [685]. **-transformation** [2037]. **-triangulation** [1971]. **-type** [1012, 755]. **-uniform** [1256]. **-uniformly** [1]. **-version** [1085, 1083, 1225, 1796, 2000]. **-virtual** [1777]. **-weighted** [1923].

1-type [344]. **17** [2074]. **1D** [431].

2 [292, 1670]. **2-sphere** [473]. **26** [109]. **2D** [431, 1178, 1395].

31 [2249]. **3D** [358, 431, 1348, 2131].

5 [591, 895].

65130 [668].

7 [829].

83d [1670]. **86d** [895]. **87c** [591].

9 [668]. **90d** [829]. **90i** [668]. **98d** [2074].

abcd} [2270]. **Abel** [514, 1635, 1636]. **abscissa** [1721, 1722]. **absolute** [594, 1455, 1702, 2283, 2151]. **absorbing** [1035, 1668, 2189]. **abstract** [348, 701]. **Accelerated** [189, 596, 986, 1677]. **accelerating** [1337]. **Acceleration** [1533, 441, 442, 1340, 1355, 1702, 1703, 1892]. **accelerator** [897]. **acceptability** [1357]. **accretive** [375, 376]. **accumulation** [638]. **Accuracy** [1800, 168, 196, 294, 590, 591, 1002, 1111, 1223, 1256, 1360, 1384, 1609, 1731, 1764, 2048]. **accuracy-enhancement** [294]. **Accurate** [751, 824, 9, 580, 933, 997, 1097, 1139, 1346, 1656, 1795, 1793, 1828, 2108, 2109, 2110, 2186, 2279, 2295]. **Accurately** [349]. **achieve** [780]. **acoustic** [208, 211, 301, 335, 390, 736, 1041, 1061, 1462, 1463, 1534, 1979]. **acoustics** [1787]. **action** [1296]. **activation** [1594]. **active** [353]. **Adams** [1221]. **Adams-type** [1221]. **adapted** [1605]. **Adapting** [618]. **Adaptive**

[57, 150, 273, 276, 281, 461, 521, 726, 725, 766, 921, 986, 991, 1155, 1453, 1545, 1826, 2102, 18, 59, 74, 88, 139, 142, 277, 280, 293, 326, 508, 539, 546, 592, 597, 682, 683, 728, 817, 818, 861, 930, 944, 1044, 1045, 1048, 1063, 1064, 1126, 1127, 1289, 1292, 1308, 1396, 1404, 1492, 1493, 1520, 1521, 1597, 1657, 1740, 2038, 2219, 2237, 2253, 2301, 462]. **adaptively** [55, 891]. **adaptivity** [1135, 1666]. **addition** [978]. **additional** [333, 1779]. **Additive** [1231, 2000, 151, 428, 641, 1267, 1432, 1439, 1538, 1629, 1666, 1776, 2198, 2257, 2274]. **additively** [581]. **ADER** [2120]. **ADER-WAF** [2120]. **adhesion** [717, 1087]. **ADI** [1862]. **Adiabatic** [1374]. **adjoint** [380, 397, 659, 1552, 1687, 2013, 2083, 2188, 2184]. **adjoint-based** [659]. **advected** [1503]. **advection** [300, 452, 893, 912, 926, 1031, 1749, 1830, 2048, 2130, 2217]. **advection-diffusion** [1749, 1830]. **advection-diffusion-reaction** [452]. **advective** [1502]. **adverse** [379]. **Afem** [550]. **affine** [224, 1822]. **after** [709]. **aggregated** [2077]. **aggregation** [1997]. **aggregation-diffusion** [1997]. **aid** [1993]. **Ale** [1656, 1483]. **Ale-Fem** [1656]. **algebra** [1241, 2141]. **algebraic** [65, 223, 493, 494, 513, 560, 677, 1026, 1134, 1174, 1193, 1469, 1570, 1587, 1596, 1701, 1827, 1846, 1983, 2012, 2040, 2042, 2101]. **algebraically** [678]. **algorithm** [345, 384, 388, 407, 483, 484, 546, 557, 619, 626, 692, 714, 744, 797, 836, 918, 931, 942, 953, 968, 970, 1000, 1075, 1120, 1137, 1190, 1246, 1299, 1319, 1320, 1331, 1342, 1464, 1513, 1594, 1676, 1700, 1768, 1779, 1868, 1896, 1902, 1986, 2104, 2162, 2169, 2209, 2215, 2232, 2240, 2259, 2277, 2297]. **Algorithms** [798, 1733, 1773, 2140, 83, 84, 113, 288, 297, 429, 529, 683, 737, 793, 870, 914, 916, 1045, 1067, 1099, 1155, 1169, 1193, 1199, 1389, 1433, 1434, 1533, 1543, 1610, 1734, 1746, 1919, 1922, 1959, 2044, 2058, 2076, 2123, 2131, 2227, 2239, 2235, 2268, 2275, 2276, 2289]. **alignment** [81]. **Allen** [44, 126, 127, 232, 353, 423, 597, 982, 1152]. **allowing** [1242]. **allows** [1116]. **alloy** [229, 230, 231, 356, 1454]. **alloys** [2272]. **alpha** [767]. **Alternate** [732, 1746, 1747]. **alternating** [342, 463, 593, 652, 651, 1114, 1946]. **Ampère** [165, 1817]. **Anal** [591, 668, 829, 895, 1670, 2074]. **analyses** [251, 576, 1231]. **Analysis** [30, 76, 139, 156, 365, 369, 406, 460, 475, 616, 601, 632, 709, 734, 844, 954, 980, 982, 981, 1052, 1107, 1179, 1220, 1230, 1269, 1330, 1445, 1540, 1602, 1613, 1649, 1654, 1874, 1943, 1949, 2120, 2249, 3, 4, 5, 8, 42, 49, 58, 68, 75, 96, 116, 117, 119, 127, 134, 138, 180, 194, 197, 198, 202, 218, 221, 236, 257, 283, 292, 304, 311, 307, 314, 318, 338, 351, 350, 353, 356, 373, 392, 424, 428, 430, 439, 468, 482, 504, 512, 514, 516, 538, 543, 554, 586, 607, 627, 631, 659, 672, 673, 704, 718, 737]. **analysis** [800, 807, 819, 820, 842, 839, 872, 879, 880, 885, 888, 893, 903, 914, 913, 904, 910, 906, 911, 916, 929, 1947, 975, 988, 1031, 1037, 1041, 1059, 1061, 1068, 1069, 1096, 1095, 1098, 1122, 1148, 1174, 1176, 1178, 1227, 1238, 1266, 1276, 1283, 1284, 1286, 1292, 1296, 1306, 1326, 1325, 1322, 1336, 1371, 1378, 1377, 1389, 1400, 1401, 1402, 1406, 1449, 1461, 1462, 1463, 1478, 1485, 1491, 1492, 1511, 1548, 1535, 1549, 1561, 1576, 1575, 1590, 1588, 1625, 1626, 1635, 1653, 1657, 1655, 1662, 1681, 1687, 1715, 1718, 1738, 1778, 1783, 1811, 1815, 1820, 1824, 1831, 1853, 1889]. **analysis** [1898, 1919, 1939, 1940, 1970, 1974, 2013, 2067, 2097, 2112, 2188, 2200, 2180, 2203, 2189, 2199, 2243, 2240, 2236, 2239, 2245, 2260, 2267, 2269, 2281, 2282, 2292, 2298, 748, 750, 1349, 1350, 2156, 476]. **analysis-suitable** [631]. **Analytic** [2146, 22, 51, 77, 1001, 1408, 1888, 1953].

analytical [12, 20, 223, 1185]. **Anderson** [442, 1892]. **Anderson-type** [442]. **Andrew** [1167]. **angles** [285]. **Anisotropic** [121, 606, 129, 128, 224, 244, 246, 761, 792, 926, 936, 937, 1104, 1152, 1508, 1509, 1621, 1951, 2243, 2278]. **annulus** [464, 1692, 1856]. **antithetic** [214]. **any** [936]. **AOR** [2202]. **apertures** [1268]. **appearing** [769]. **Application** [619, 2256, 2, 72, 130, 255, 289, 371, 431, 506, 524, 559, 575, 592, 623, 785, 791, 944, 946, 1112, 1244, 1302, 1316, 1430, 1429, 1484, 1592, 1663, 1724, 1801, 1853, 2060, 2162, 2192]. **Applications** [1046, 117, 122, 146, 188, 192, 281, 463, 470, 611, 626, 642, 693, 1027, 1028, 1147, 1144, 1182, 1370, 1433, 1434, 1594, 1646, 1955, 1959, 2050, 2097, 2113, 2248, 2249]. **applied** [132, 191, 293, 294, 486, 599, 598, 1017, 1145, 1262, 1501, 1595, 1604, 1632, 1706, 1794, 1989, 2202]. **appraisal** [1855]. **approach** [74, 132, 291, 726, 807, 810, 887, 892, 947, 1072, 1200, 1241, 1318, 1359, 1449, 1486, 1519, 1606, 1755, 1756, 1798, 1799, 1824, 1845, 1844, 1853, 1923, 2109, 2124, 2138, 2219, 2306, 720]. **approximants** [971, 1381]. **approximate** [227, 503, 608, 656, 773, 814, 899, 935, 1092, 1241, 1243, 1308, 1473, 1707]. **approximated** [633, 695]. **Approximating** [1187, 1607, 22, 743, 771, 1760, 1761, 1762, 1959, 757, 2083, 2110, 2235]. **Approximation** [118, 114, 301, 414, 424, 451, 849, 1162, 1219, 1218, 1263, 1281, 1386, 1486, 1744, 2025, 2251, 7, 18, 21, 32, 36, 33, 37, 49, 61, 70, 71, 86, 90, 120, 122, 144, 168, 181, 198, 201, 211, 215, 239, 241, 242, 243, 235, 229, 230, 231, 232, 228, 244, 250, 245, 233, 234, 248, 252, 254, 259, 257, 264, 272, 279, 309, 318, 320, 375, 376, 372, 378, 387, 397, 405, 419, 427, 437, 443, 467, 469, 506, 507, 519, 535, 536, 548, 553, 559, 560, 561, 611, 624, 637, 639, 666, 674, 682, 690, 696]. **approximation** [705, 736, 777, 784, 786, 787, 795, 813, 845, 848, 847, 863, 868, 871, 881, 901, 907, 909, 924, 936, 952, 998, 999, 1006, 1021, 1039, 1066, 1087, 1088, 1115, 1171, 1205, 1222, 1261, 1265, 1279, 1285, 1305, 1332, 1337, 1338, 1345, 1348, 1366, 1367, 1380, 1390, 1406, 1408, 1423, 1432, 1446, 1457, 1459, 1495, 1500, 1503, 1527, 1537, 1591, 1593, 1619, 1620, 1646, 1886, 1657, 1682, 1745, 1771, 1788, 1808, 1819, 1840, 1854, 1884, 1887, 1939, 1941, 1957, 1978, 1990, 2031, 2067, 2087, 2091, 2103, 2109, 2133, 2167, 2199, 2209, 2210, 2211, 2214, 2222, 2226, 2229, 2237, 2257, 2262]. **approximations** [9, 16, 17, 44, 53, 59, 72, 145, 166, 176, 246, 249, 247, 265, 423, 430, 456, 457, 505, 530, 582, 634, 654, 659, 668, 669, 686, 694, 724, 735, 751, 796, 897, 908, 905, 924, 943, 1004, 1031, 1033, 1054, 1081, 1082, 1079, 1111, 1113, 1125, 1128, 1181, 1357, 1399, 1422, 1439, 1442, 1441, 1444, 1505, 1517, 1550, 1551, 1577, 1578, 1653, 1693, 1694, 1707, 1770, 1826, 1828, 1849, 1861, 1948, 1984, 1995, 2003, 2018, 2037, 2055, 2075, 2125, 2132, 2131, 2134, 2206, 2231, 2299, 2304, 752]. **Arbitrarily** [2001]. **Arbitrary** [792, 178, 763, 791, 961, 1018, 1117, 1263, 1557, 1627, 1642, 723]. **Arbitrary-order** [792, 791]. **arcs** [2261]. **arguments** [1811]. **arising** [45, 41, 346, 443, 504, 907, 973, 1130, 1174, 1208, 1303, 1317, 1465, 1596, 1861, 1912]. **arithmetic** [1309, 1832, 1833, 2031]. **Arnold** [536]. **Aronszajn** [944]. **artificial** [1128, 2095]. **aspects** [1992]. **asserting** [2162]. **assets** [1321]. **assimilation** [1342, 1581]. **associated** [83, 84, 94, 1192, 2269]. **assumptions** [1050, 2299]. **asymmetric** [1686]. **asymmetry** [2043]. **Asymptotic** [565, 859, 1088, 1712, 1843, 2016, 2187, 2229, 28, 80, 113, 562, 882, 883, 914, 1089, 1094, 1166, 1339, 1399, 1499, 1594, 1622, 1674, 2047, 2236]. **asymptotic-preserving** [882, 883, 1094]. **Asymptotically** [845, 1599]. **asymptotics** [764].

asynchronous [1743]. **atom** [50]. **atomistic** [1579, 2203]. **atomistic-to-continuum** [1579]. **attenuation** [1942]. **attracting** [2012]. **attraction** [1049]. **attractivity** [1998]. **attractor** [1278, 1281]. **Attractors** [1468, 1175, 1469]. **Augmented** [870, 995, 1343, 2148, 85, 251, 512, 688, 783, 1150, 1244, 1494, 1511, 1532, 1565, 1571, 1923]. **auto** [173, 1891]. **auto-correction** [1891]. **auto-correlation** [173]. **Automatic** [638, 1593, 503]. **autonomous** [630, 1409]. **Auxiliary** [749, 1737, 1898]. **Average** [1837, 71, 425]. **averages** [926, 1541]. **averaging** [695, 1854, 1986]. **averse** [276]. **Avoiding** [63, 64, 259, 260]. **aware** [142]. **axisymmetric** [236, 304, 1057, 1122, 1824, 1825].

B [500, 934, 1115, 1425, 2139]. **B-series** [500]. **B-spline** [934, 1115, 1425, 2139]. **Babuska** [260]. **back** [886]. **Backward** [346, 364, 1638, 758, 42, 76, 212, 584, 789, 1009, 1478, 1484, 1610, 1700, 1743, 1757, 1944, 2094, 2112]. **Bakhvalov** [1602]. **Bakhvalov-Shishkin** [1602]. **balance** [1067, 1445]. **ball** [368, 1884]. **Banach** [144, 385, 533, 555, 989, 1780, 2201]. **band** [688, 759]. **Banded** [1211]. **Barlow** [2266]. **barotropic** [1039]. **Barrett** [111]. **barrier** [1384, 1838]. **Barycentric** [2291, 164, 559, 1275, 1381]. **Barzilai** [1341, 171, 731, 730, 1938]. **Basc** [1006]. **based** [10, 112, 200, 357, 370, 415, 433, 533, 554, 572, 584, 619, 633, 659, 695, 696, 724, 793, 878, 908, 922, 928, 980, 1000, 1071, 1091, 1158, 1209, 1217, 1255, 1430, 1449, 1511, 1515, 1522, 1584, 1610, 1696, 1697, 1702, 1739, 1740, 1746, 1747, 1812, 1865, 1916, 1917, 2029, 2055, 2108, 2124, 2128, 2157, 2204, 2194, 2266, 2285]. **bases** [73, 1522, 2119]. **basis** [185, 266, 477, 527, 624, 700, 1003, 1004, 1032, 1041, 1372, 1526, 1537, 1659, 1888, 1964, 2244, 2280]. **batch** [2269]. **bathymetry** [395]. **BDDC** [525, 2140]. **BDF** [44, 1055, 1359, 1598]. **BDF-like** [1359]. **BDF2** [1597, 1599, 2219]. **be** [288]. **Beam** [2128]. **beams** [2018]. **Bean** [904]. **bed** [640]. **behavior** [1421, 1898]. **behaviour** [552, 565, 566, 719, 859, 877, 1018, 1622, 1843, 2255]. **Bellman** [1380, 1387, 1751]. **Bellman-type** [1751]. **Beltrami** [490]. **BEM** [10, 206, 328, 444, 878, 947, 971, 972, 1766, 1767]. **bending** [258, 374, 1819]. **benefit** [1330]. **Bernstein** [1872, 1876]. **bespoke** [1015]. **Bessel** [2249, 2248]. **Best** [1884, 1887, 2226, 272, 419, 437, 536, 924, 998, 1620, 1693, 1694, 1854]. **best-approximation-type** [272]. **between** [80, 292, 466, 1004, 1136, 2119]. **beyond** [810]. **Bézier** [690]. **BFGS** [156, 2277]. **bi** [898, 1027, 1028, 1162]. **bi-criteria** [898]. **bi-Laplacian** [1027, 1028]. **bi-variate** [1162]. **bicubic** [199]. **bidiagonal** [1250, 1705]. **bidimensional** [1976]. **BIE** [948, 949]. **Bifurcation** [1590, 60, 778, 920, 1771, 1995]. **Bifurcations** [2073, 2074, 587, 1165]. **biharmonic** [412, 415, 434, 817, 822, 1036, 1080, 1091, 1197, 1563, 1659, 2257, 2287]. **bilateral** [218]. **bilayer** [258, 374]. **bilinear** [1008]. **binary** [1454]. **biofilms** [738]. **biomembranes** [1057]. **Biot** [1584, 1571, 2293]. **biperiodic** [1396]. **Birkhoff** [21]. **bisection** [1062]. **bivariate** [1820, 2065]. **Black** [559, 1425, 2196, 1350]. **Bloch** [1119]. **Block** [297, 1901, 72, 188, 371, 473, 691, 716, 1947, 1024, 1142, 1154, 1244, 1250, 1277, 1630, 1644, 1708, 2060, 2260]. **Block-diagonal** [1901, 691, 1024]. **block-separable** [1154]. **block-tridiagonal** [716]. **blocks** [39, 1705]. **Blow** [603, 991]. **Blow-up** [603, 991]. **bmo** [118]. **bodies** [392, 947]. **body** [717, 1287, 2026]. **Bogdanov** [338, 1378, 1377, 2241]. **Boltzmann** [999]. **Boor** [2259]. **bordered** [2260]. **borders** [1142]. **Borwein** [171, 731, 730, 1341, 1938]. **bound**

[222, 229, 231, 415, 724, 918, 1037, 1079, 1157, 1610, 1690, 1838, 1925, 1964, 2038]. **bound-constrained** [1157]. **bound-preserving** [222]. **boundaries** [607, 1386]. **Boundary** [1310, 1351, 1523, 7, 12, 27, 63, 64, 66, 67, 92, 124, 132, 131, 141, 145, 163, 182, 192, 207, 208, 213, 238, 242, 247, 291, 293, 303, 314, 327, 335, 340, 341, 361, 363, 390, 403, 404, 406, 491, 498, 512, 544, 540, 549, 553, 564, 566, 578, 588, 589, 607, 619, 603, 629, 658, 662, 674, 686, 701, 760, 762, 765, 802, 816, 823, 833, 888, 894, 909, 930, 944, 950, 960, 977, 1035, 1059, 1069, 1093, 1105, 1126, 1127, 1124, 1125, 1171, 1172, 1207, 1223, 1236, 1257, 1258, 1262, 1267, 1268]. **boundary** [1284, 1287, 1299, 1305, 1307, 1380, 1383, 1388, 1393, 1392, 1413, 1428, 1443, 1449, 1485, 1489, 1514, 1563, 1586, 1657, 1668, 1679, 1713, 1726, 1736, 1765, 1789, 1797, 1823, 1857, 1912, 1942, 1991, 2048, 2053, 2079, 2088, 2093, 2092, 2097, 2095, 2098, 2132, 2176, 2203, 2197, 2189, 2230, 2256, 1350]. **boundary-concentrated** [888]. **boundary-driven** [566]. **boundary-finite** [1310]. **boundary-locus** [192]. **boundary-value** [291, 406, 619, 1172, 1765]. **Bounded** [2046, 643, 919, 1929, 1953, 2016, 2067, 2286]. **Bounded-norm** [2046]. **boundedness** [1257, 1258, 1422]. **boundedness-by-entropy** [1422]. **Bounds** [1385, 32, 34, 36, 33, 37, 54, 140, 215, 216, 219, 316, 411, 614, 634, 760, 770, 796, 808, 811, 814, 825, 1055, 1056, 1082, 1084, 1240, 1409, 1408, 1539, 1834, 1832, 1833, 1872, 1873, 1948, 1954, 1971, 2030, 2094, 2121, 2179, 2195, 2205, 2207]. **Boussinesq** [958, 1562, 1851]. **box** [945, 995, 1050, 1616, 1911, 2014]. **BPX** [631]. **Branch** [60, 507]. **branched** [716]. **breaking** [1377, 1771, 2241]. **bridge** [2200]. **Bridging** [1544]. **Brinkman** [69, 79, 139, 137, 555, 1023, 1412, 1777]. **Broken** [253, 470, 534]. **broken-FEEC** [534]. **Brownian** [530, 1295, 2200]. **Broyden** [1677, 2289]. **BSDEs** [1803]. **bubble** [1008, 1132]. **Bulk** [66, 67, 880, 890, 911]. **Bulk-surface** [66, 67, 880, 890, 911]. **bundle** [1768]. **Burgers'** [1989, 1564, 1962]. **Burgers-like** [1564]. **Burniston** [77]. **Burniston-Siewert** [77].

Cahn [232, 44, 49, 126, 127, 150, 353, 423, 613, 597, 786, 794, 982, 1152, 1153, 1205, 1236, 1461, 1527, 1575, 1599, 1736, 1797, 2219]. **Cahn/Cahn** [232]. **calculating** [1000]. **calculation** [343, 378, 684, 1164, 1633]. **calculations** [1576]. **calculus** [635, 1969]. **Call** [97]. **Camassa** [2206]. **can** [288]. **Canham** [1151]. **canonical** [94]. **capillarity** [528]. **capillary** [285, 433]. **capturing** [1962]. **Caputo** [2088]. **Carathéodory** [900, 901, 1897]. **cardiac** [78]. **cardinality** [550]. **Carlo** [214, 693, 1098, 1099, 1117, 1370, 1452, 1516, 1543, 1664, 1882]. **Cartan** [642]. **Cartesian** [1394]. **cartoon** [906]. **case** [50, 379, 713, 810, 944, 949, 948, 1305, 1871, 1909, 1911]. **Cauchy** [155, 348, 672, 706, 1531, 1877, 1895]. **Cauchy-type** [706]. **cavity** [992]. **cell** [71, 557, 936, 1052, 1087, 1204, 1260]. **cell-average** [71]. **cell-centred** [557, 936, 1260]. **cells** [3]. **centered** [921]. **central** [465, 1553, 1748]. **central-difference** [1748]. **central-upwind** [465]. **centre** [1415]. **Centred** [2129, 557, 618, 936, 1240, 1260]. **certain** [698, 801, 914, 1114, 1303, 1465, 1873, 2238]. **certified** [928]. **CG** [1838, 2268]. **chain** [1543, 1840, 2203]. **chains** [344, 1530]. **Change** [854, 1369, 781, 861, 1945, 2261, 2288]. **changes** [878]. **changing** [1013]. **channel** [1438]. **chaos** [2125]. **Characteristic** [392, 124, 422]. **charge** [3]. **Cheap** [1504].

chebfuns [1852]. **Chebyshev** [61, 324, 325, 419, 808, 941, 1149, 1438, 1549, 1564, 1693, 1753, 1788, 1872, 2047, 2072, 2071, 2157, 2186, 2212, 2214, 2226]. **chemotaxis** [1973]. **choice** [708, 1405, 1938]. **Cholesky** [576, 2080, 2288]. **choosing** [362, 1542]. **Chordal** [997]. **Christoffel** [763]. **CIP** [2236, 275]. **CIP-stabilized** [275]. **circle** [480, 692, 1131]. **circulant** [1370]. **circular** [992, 1692]. **claims** [2306, 788]. **class** [7, 156, 188, 459, 460, 475, 476, 518, 539, 589, 670, 923, 967, 988, 1078, 1093, 1193, 1208, 1209, 1261, 1298, 1424, 1448, 1450, 1568, 1684, 1760, 1806, 1933, 1959, 1983, 2013, 2039, 2048, 2126, 2146, 2194, 2150]. **classes** [18, 1295]. **classical** [153, 165]. **classification** [2017]. **Clement** [130]. **Clement-type** [130]. **Clenshaw** [815, 2249, 19, 2248]. **close** [700, 1555]. **close-to-touching** [700, 1555]. **Closed** [1288, 245, 345, 1115, 1987]. **Closed-form** [1288]. **closest** [931]. **Closing** [466]. **closure** [113]. **clustered** [2291]. **clustering** [1489]. **coagulation** [13]. **coagulation-fragmentation** [13]. **coarse** [380, 891]. **codes** [572, 1220, 2024]. **codimension** [761]. **coefficient** [561, 667, 1183, 1407, 1406, 1428, 1444, 1790, 1801, 1887, 1981, 2217]. **coefficients** [118, 378, 595, 600, 628, 768, 886, 1003, 1108, 1327, 1347, 1370, 1408, 1418, 1417, 1452, 1695, 1753, 1775, 1808, 1878, 1937, 2125, 2186, 2199, 2193, 2278, 2298, 749]. **coercivity** [207]. **collection** [2026]. **Collective** [1711]. **Collocation** [56, 1456, 1587, 2116, 28, 159, 306, 340, 342, 352, 444, 455, 454, 458, 460, 610, 706, 801, 835, 1043, 1088, 1134, 1146, 1179, 1208, 1216, 1262, 1414, 1425, 1438, 1507, 1546, 1549, 1564, 1588, 1645, 1672, 1742, 1766, 1767, 1862, 2059, 2072, 2071, 2111, 2170, 2197, 2229, 2230, 1233]. **collocation-type** [1507]. **combination** [1149, 1943]. **combinations** [1140]. **combinatorial** [1827]. **combined** [390, 549, 2169]. **committed** [2159]. **commutator** [351, 350]. **commutator-free** [351, 350]. **commuting** [924, 2099]. **Compact** [470, 1060, 785, 1033, 2069, 2270]. **compactly** [624]. **Compactness** [1447]. **companion** [758]. **compared** [1431]. **Comparison** [271, 543, 77, 219, 516, 538, 1034]. **Comparisons** [1004, 2026]. **compatible** [369, 845, 992, 1599]. **compensate** [618]. **complement** [1104, 2060]. **complementarity** [186, 2205, 2204]. **complementary** [2117]. **complete** [386, 2161]. **completely** [719, 2255]. **completion** [52, 593]. **Complex** [154, 1355, 133, 297, 381, 763, 791, 889, 1001, 1002, 1091, 1193, 1373, 1686, 1693, 1833, 1994, 2186, 2212]. **complexes** [934]. **Complexity** [1078, 1158, 1671, 546, 713, 728, 1150, 1163, 1838, 2268]. **component** [229, 230, 231, 356, 1092, 2200]. **Componentwise** [2205, 627, 1968]. **composed** [288]. **Composite** [1886, 409, 690, 2232, 2253]. **composition** [834]. **compound** [799, 1472]. **compressible** [363, 1039, 1110, 1260, 1446, 1514, 1582, 1643, 1674, 1875]. **compressible-gas** [1110]. **Compressive** [2197]. **Computable** [34, 33, 37, 140, 1262, 1539, 2195, 32, 2166]. **Computation** [1415, 1721, 1722, 1772, 1897, 2077, 8, 39, 337, 401, 419, 578, 836, 912, 920, 1097, 1341, 1510, 1511, 1541, 1645, 1663, 1733, 1785, 1863, 1866, 2135, 2139, 2186]. **Computational** [614, 778, 1889]. **Computations** [1251, 728, 1664, 1680]. **compute** [1061]. **computed** [770, 877]. **computer** [1219, 1218]. **computerized** [1896]. **computers** [1832]. **Computing** [193, 422, 421, 860, 1274, 1397, 1961, 2104, 2105, 2283, 2300, 95, 349, 588, 660, 700, 953, 1032, 1246, 1701, 1723, 1842, 2020, 2036, 2254]. **concentrated** [888]. **concentration** [230]. **concentration-dependent** [230].

concerning [1856]. **condition** [83, 84, 182, 213, 242, 262, 286, 287, 293, 323, 425, 627, 950, 986, 990, 1069, 1182, 1255, 1429, 1560, 1610, 2095, 2203, 2235, 2288, 1350]. **conditional** [860]. **conditioned** [173, 1103, 2097]. **conditioning** [149, 993, 1960]. **Conditions** [1906, 66, 67, 124, 145, 208, 260, 270, 314, 363, 390, 479, 512, 549, 564, 670, 686, 816, 823, 833, 940, 960, 967, 977, 1035, 1171, 1198, 1236, 1257, 1258, 1284, 1380, 1383, 1388, 1485, 1518, 1563, 1583, 1668, 1736, 1797, 1857, 2048, 2065, 2079, 2149, 2197, 2189, 2224]. **conducting** [392]. **conduction** [32]. **conductivity** [869, 1555]. **configuration** [1471]. **conformal** [569, 899, 1034, 1473, 1515, 1549]. **Conforming** [522, 1202, 1438, 1566, 2183, 129, 445, 482, 556, 893, 1023, 1024, 1070, 1203, 1227, 1535, 1580, 1595, 1811, 1816]. **conical** [255]. **conjecture** [1856]. **Conjugate** [1686, 184, 898, 1213, 1373, 1922, 2043, 2169, 2284]. **conjugate-gradient** [1373]. **conjugation** [1383]. **connected** [1473, 1742]. **connecting** [337, 1772]. **conquer** [1695]. **Conservation** [665, 26, 142, 405, 568, 583, 647, 683, 1015, 1074, 1214, 1257, 1258, 1266, 1308, 1447, 1475, 1476, 1731, 1738, 1967, 2010, 2030, 2063, 2129, 2279]. **Conservative** [510, 1973, 1985, 300, 1136, 1913, 1914, 1932]. **conserving** [617, 811, 1133]. **Consistency** [1514, 2067, 943, 2013, 2130]. **Consistent** [881, 809, 1259, 2287]. **consolidation** [1584, 1990]. **Constant** [36, 810, 1379, 2127, 2262]. **constants** [437, 1208, 2115, 2165]. **constituted** [2091]. **Constrained** [2253, 2, 57, 117, 171, 255, 261, 289, 419, 605, 622, 712, 918, 995, 1006, 1157, 1177, 1201, 1464, 1600, 1616, 1779, 1802, 1838, 1955, 1996, 2011, 2082]. **Constraining** [1477]. **constraint** [1318, 1403, 1925]. **constraints** [258, 257, 276, 435, 546, 548, 724, 745, 1255, 1700, 1887]. **constricted** [1438]. **Constructing** [1867, 1773]. **Construction** [1112, 1339, 1515, 929, 1136, 1243, 1348, 1409, 2228, 2258]. **Constructive** [1378, 182]. **contact** [31, 119, 218, 285, 292, 633, 760, 802, 2178, 2183]. **context** [1676, 2028]. **contingent** [2306, 788]. **continuation** [858, 1016, 1089, 1331, 1890, 2020]. **continued** [716]. **Continuous** [65, 220, 955, 1038, 1972, 2055, 35, 487, 525, 905, 1018, 1056, 1086, 1390, 1409, 1528, 1620, 1932, 2127, 2192, 2209]. **continuous-in-time** [905]. **continuum** [1579, 1840]. **Contour** [1001, 2220]. **contours** [383]. **contraction** [1762]. **contractive** [1892]. **contrast** [488]. **control** [54, 116, 115, 132, 143, 188, 435, 440, 441, 503, 541, 548, 553, 605, 866, 890, 919, 1084, 1089, 1126, 1127, 1124, 1200, 1214, 1403, 1517, 1840, 1850, 1874, 1911, 1915, 1920, 2003]. **control-state** [605]. **controlled** [295, 1219, 1218]. **controls** [919]. **convected** [1348]. **Convection** [393, 394, 166, 172, 195, 223, 294, 299, 446, 506, 521, 545, 556, 566, 621, 616, 604, 651, 695, 751, 782, 813, 868, 884, 961, 1052, 1056, 1079, 1189, 1196, 1444, 1451, 1470, 1561, 1602, 1604, 1617, 1633, 1641, 1640, 1657, 1656, 1680, 1729, 1782, 1784, 1826, 1988, 2034, 2188, 2191, 2224, 2245, 2301, 720, 275, 752, 2093]. **convection-diffusion** [166, 223, 294, 446, 506, 521, 556, 566, 616, 782, 868, 961, 1052, 1079, 1196, 1444, 1451, 1602, 1604, 1641, 1640, 1657, 1656, 1680, 1729, 1782, 1988, 2034, 2188, 2224, 2245, 752]. **convection-diffusion-reaction** [695]. **Convection-diffusion-type** [2093]. **convection-dominated** [195, 1189, 1561]. **convective** [552]. **converge** [1888]. **Convergence** [5, 12, 25, 51, 181, 191, 228, 326, 351, 350, 359, 358, 444, 471, 528, 539, 567, 683, 693, 729, 728, 738, 817, 818, 837, 842, 865, 953, 988, 1031, 1040, 1041, 1048, 1063, 1073, 1204, 1235, 1294,

1296, 1326, 1336, 1387, 1418, 1417, 1428, 1429, 1462, 1503, 1512, 1524, 1610, 1640, 1643, 1797, 1811, 1882, 1898, 1916, 1978, 2017, 2125, 2202, 2201, 2217, 2231, 2232, 2243, 2240, 2239, 2245, 2259, 2286, 2298, 2156, 47, 68, 83, 84, 85, 96, 149, 171, 179, 186, 195, 209, 265, 273, 280, 329, 354, 368, 398, 399, 400, 423, 441, 457, 481]. **convergence** [574, 573, 579, 586, 599, 596, 597, 625, 694, 706, 711, 731, 762, 772, 794, 800, 807, 821, 820, 841, 839, 899, 902, 952, 967, 975, 976, 989, 990, 1045, 1076, 1101, 1102, 1176, 1178, 1205, 1231, 1239, 1248, 1257, 1258, 1278, 1295, 1320, 1331, 1321, 1337, 1355, 1372, 1386, 1388, 1390, 1416, 1467, 1476, 1492, 1505, 1513, 1514, 1521, 1538, 1577, 1578, 1582, 1557, 1583, 1574, 1600, 1625, 1657, 1655, 1654, 1667, 1677, 1702, 1726, 1725, 1741, 1770, 1794, 1805, 1810, 1883, 1893, 1906, 1904, 1908, 1910, 1921, 1922, 1945, 1967, 1995, 2001, 2002, 2008, 2007, 2015, 2038]. **convergence** [2056, 2121, 2123, 2126, 2137, 2188, 2198, 2185, 2189, 2223, 2242, 2275, 2276, 2278, 2284, 1350, 1917]. **Convergent** [1125, 1301, 1450, 1555, 1791, 2044, 200, 203, 261, 345, 374, 583, 619, 651, 659, 974, 984, 1064, 1075, 1126, 1127, 1293, 1299, 1404, 1446, 1658, 1728, 1735, 1736, 1737, 1801, 1875, 2098]. **Conversion** [2119]. **convex** [2, 156, 282, 347, 539, 546, 774, 1025, 1118, 1245, 1244, 1464, 1594, 1839, 2059]. **Convexity** [1427, 781]. **Convexity-preserving** [1427]. **Convolution** [578, 1206, 207, 208, 575, 932, 1207, 1215, 1623, 1634, 1635, 1766, 1767, 1936]. **convolution-space** [1766, 1767]. **Cook** [1527]. **coordinate** [371, 1871]. **coordinates** [1763, 2077]. **corank** [60]. **corank-** [60]. **corner** [209, 1254, 1641]. **corotational** [250]. **Corrected** [1684, 1411]. **correcting** [714]. **Correction** [112, 403, 883, 1917, 223, 226, 491, 486, 946, 1200, 1260, 1891]. **corrections** [409, 1864]. **corrector** [886, 2151, 2155, 2153, 2154]. **Correlation** [52, 173, 384, 1274, 1923, 2283]. **corresponding** [996, 1455]. **Corrigendum** [233, 375, 462, 591, 829, 1127, 1577, 1798]. **CORSING** [452]. **Cosine** [2261, 523, 668, 669]. **cost** [461, 462]. **Cotes** [1556, 2238]. **counterexample** [1185]. **counterpart** [199]. **Coupled** [1963, 26, 58, 123, 141, 312, 313, 370, 410, 486, 533, 612, 701, 890, 911, 938, 985, 1071, 1122, 1296, 1310, 1462, 1605, 1624, 1658, 1826, 1939, 1944, 1988, 2164, 2294]. **Coupling** [540, 10, 62, 69, 80, 293, 444, 498, 544, 558, 803, 804, 947, 972, 987, 1070, 1072, 1463, 1579, 1688, 1724, 1787, 1970]. **couplings** [658]. **covariance** [709, 1486]. **covariant** [767]. **Cox** [53, 694]. **CQ** [206]. **CQ-BEM** [206]. **crack** [577]. **cracks** [279]. **Craig** [2245]. **Crank** [727, 1140, 1402, 1648, 1945, 2256]. **Crank-Gupta** [727]. **criss** [483]. **criss-cross** [483]. **criteria** [362, 898, 1542, 1743]. **criterion** [269]. **critical** [785, 910, 2145]. **critical-state** [910]. **criticality** [1664]. **cross** [333, 392, 483, 517, 738, 999, 1422]. **cross-diffusion** [333, 517, 738, 1422]. **cross-section** [392]. **Crouzeix** [198, 1493, 1601]. **crystal** [1597, 1598, 1735]. **crystals** [1665]. **Cubature** [2158, 296, 996, 1112, 1660]. **Cubic** [1689, 46, 182, 199, 281, 526, 546, 690, 737, 997, 1239, 1456, 1678, 1864, 1918, 2053, 2056, 2066]. **curl** [169, 585, 601, 646, 1304, 1315, 1590, 749]. **curl-curl** [646]. **current** [10, 304, 303, 392, 696, 790, 904, 1946, 1957, 2054]. **curse** [2200]. **Curtis** [2248, 2249, 19, 815]. **curvature** [247, 236, 345, 635, 710, 881, 908, 939, 982, 1021, 1503, 1822]. **Curve** [676, 248, 690, 760, 761, 908, 1836]. **curved** [238, 242, 802, 1263, 1449, 1965, 1970]. **curves** [152, 245, 252, 254, 259, 255, 387, 922, 962, 964, 1987]. **curvilinear** [667]. **cusps** [2070]. **cut** [490, 491, 1525]. **Cycle**

[2243]. **cyclic** [730, 1871]. **cylinder** [1097, 2106]. **cylindrical** [1518].

D [89, 278, 396, 545, 567, 628, 651, 910, 1346, 1479, 1534, 1655, 1683]. **dam** [2117]. **damage** [1963]. **damped** [1529, 1924]. **damping** [2256]. **Darboux** [763]. **Darboux-type** [763]. **Darcy** [58, 62, 69, 170, 312, 313, 432, 433, 612, 613, 769, 803, 804, 1071, 1229, 1545, 1688, 1724, 2294]. **Data** [705, 874, 27, 71, 155, 238, 273, 303, 346, 419, 545, 692, 742, 775, 774, 780, 781, 805, 849, 962, 992, 998, 1161, 1307, 1319, 1342, 1401, 1514, 1581, 1646, 1661, 1704, 1848, 2102, 2214, 2244, 2245, 2251]. **data-reduction** [1646]. **DDFV** [89, 407]. **decaying** [1130]. **decomposable** [1879]. **decomposing** [906]. **decomposition** [148, 321, 336, 392, 557, 642, 725, 816, 932, 980, 1066, 1091, 1105, 1123, 1162, 1163, 1189, 1231, 1642, 2076, 2132, 2194, 2263]. **decompositions** [335, 425, 657, 656, 824, 1032, 1317, 1435, 2081, 2280]. **decoupled** [203, 529, 613]. **Decoupling** [1705]. **Dedication** [1368]. **Deep** [1171, 395, 1431, 1803]. **defect** [409, 946, 226]. **deferred** [946, 1200]. **deficient** [286]. **definite** [473, 474, 1224, 1695, 1869, 1907, 2025]. **definiteness** [269]. **definition** [635]. **defocusing** [6]. **deformations** [373, 374]. **Degasperis** [660]. **Degenerate** [1387, 14, 201, 516, 539, 738, 1016, 1083, 1144, 1344, 1444, 2054, 2171, 2191]. **degenerate-singular** [738]. **degree** [525, 616, 1427]. **degrees** [196]. **Delay** [1184, 191, 193, 214, 284, 422, 467, 702, 1186, 1185, 1216, 1312, 1615, 1874, 1986, 2149, 2240, 2282, 1349, 2155]. **delay-integro-differential** [2282]. **delays** [458, 460, 1312, 1324, 2127]. **delta** [183]. **Delves** [77]. **Delves-Lyness** [77]. **denominator** [774]. **Density** [1955, 554, 596, 904, 1030]. **depend** [2121]. **dependent** [10, 39, 126, 207, 208, 212, 221, 230, 310, 314, 453, 651, 718, 751, 804, 874, 878, 1054, 1184, 1247, 1271, 1285, 1311, 1388, 1406, 1442, 1471, 1480, 1648, 1732, 1813, 1937, 2082, 2191, 750, 2175]. **derivation** [1481]. **Derivative** [580, 623, 675, 776, 1004, 1138, 1328, 1568, 1878, 1953, 2088, 2290]. **Derivative-free** [580, 623, 675, 1568]. **derivatives** [383, 864, 1752, 1759, 1903, 2104, 2105, 2139, 2195, 2262]. **derived** [1431, 1716]. **Descent** [47, 371, 710, 711, 726, 746, 1061, 1176, 1389, 1871, 1802, 2284]. **describing** [317]. **Design** [839, 1492, 2110, 1083, 2109]. **determinants** [1358, 2146]. **Determination** [1149, 173, 776, 1139, 1282]. **deterministic** [662, 1078, 1622]. **DeTurck** [908]. **Developments** [1903, 1120, 1831]. **Devising** [656, 658, 657]. **dewetting** [2296]. **DG** [1258, 601, 821, 885, 1203, 1227, 1501, 1502, 1609, 1928, 2294, 2293, 2292, 2301, 749]. **DGFEM** [2009, 2007, 2225]. **diagonal** [691, 1024, 1901]. **diagonalization** [2099]. **diagonally** [513, 2027]. **Difference** [14, 7, 13, 46, 42, 133, 217, 291, 361, 364, 365, 443, 558, 588, 589, 651, 686, 687, 707, 789, 823, 894, 942, 967, 1000, 1002, 1223, 1293, 1294, 1296, 1313, 1360, 1384, 1418, 1417, 1444, 1447, 1474, 1475, 1484, 1518, 1604, 1638, 1657, 1655, 1654, 1703, 1716, 1719, 1731, 1748, 1763, 1792, 1943, 2010, 2030, 2087, 2088, 2090, 2098, 2171, 2173, 2217, 2255, 2271, 2270, 2272]. **difference-type** [2255]. **differences** [505, 705, 1060]. **different** [2119]. **differentiability** [426, 940]. **differentiable** [1139, 1878]. **differential** [1, 65, 122, 175, 193, 201, 226, 284, 379, 422, 466, 467, 495, 513, 523, 530, 551, 579, 584, 614, 725, 876, 895, 896, 902, 911, 905, 921, 927, 928, 934, 1007, 1010, 1022, 1043, 1100, 1136, 1165, 1174, 1175, 1184, 1215, 1216, 1221, 1269, 1295, 1304, 1316, 1312, 1334, 1344, 1354, 1375, 1391, 1409, 1458, 1459, 1469, 1468, 1498, 1528, 1585,

1577, 1578, 1583, 1587, 1603, 1615, 1619, 1638, 1651, 1669, 1670, 1672, 1701, 1710, 1744, 1757, 1776, 1795, 1808, 1810, 1827, 1846, 1859, 1860, 1862, 1897, 1940, 1941, 1949, 1972, 2012, 2032, 2077, 2085, 2111, 2112, 2127, 2141, 2149]. **differential** [2226, 2228, 2282, 2305, 1349, 2160]. **differential-algebraic** [65, 513, 1827, 1846]. **differential-functional** [2305]. **differentiation** [212, 364, 514, 1009, 1211, 1365, 1460, 2234, 2258]. **diffuse** [912, 1759]. **diffusion** [23, 91, 133, 166, 172, 195, 209, 223, 264, 294, 300, 333, 364, 378, 410, 421, 446, 452, 506, 516, 517, 521, 545, 556, 561, 563, 567, 565, 566, 616, 604, 652, 651, 654, 695, 738, 751, 782, 792, 813, 845, 862, 868, 879, 884, 889, 893, 912, 915, 926, 936, 937, 961, 972, 1020, 1052, 1079, 1095, 1165, 1196, 1209, 1335, 1398, 1407, 1400, 1406, 1422, 1444, 1451, 1470, 1479, 1480, 1501, 1509, 1561, 1602, 1604, 1605, 1608, 1617, 1622, 1641, 1640, 1657, 1654, 1656, 1658, 1680, 1729, 1725, 1749, 1782, 1784, 1792, 1794]. **diffusion** [1796, 1830, 1883, 1900, 1909, 1984, 1988, 1997, 2005, 2034, 2089, 2093, 2092, 2130, 2148, 2188, 2191, 2197, 2224, 2240, 2245, 2299, 2301, 788, 275, 752]. **diffusion-uniform** [1501]. **diffusions** [17, 1289, 1853]. **diffusive** [431, 482, 1622]. **diffusivity** [926]. **digital** [793, 1116]. **digits** [1832, 2143]. **dilute** [250]. **Dimension** [1232, 223, 617, 735, 936, 1060, 1254, 1729, 1732, 1858, 2087]. **dimension-splitting** [1254]. **dimensional** [41, 71, 120, 153, 182, 266, 329, 391, 407, 413, 428, 432, 431, 443, 454, 563, 643, 645, 666, 929, 944, 948, 1018, 1052, 1061, 1171, 1188, 1248, 1259, 1268, 1383, 1398, 1436, 1460, 1536, 1553, 1570, 1590, 1609, 1650, 1654, 1656, 1709, 1766, 1767, 1808, 1849, 1909, 1939, 2017, 2030, 2044, 2085, 2180, 2197, 2245, 2246, 2247, 2297, 1218]. **dimensionality** [2200]. **dimensionally** [34]. **dimensions** [14, 70, 136, 174, 215, 268, 359, 693, 816, 930, 970, 1202, 1222, 1314, 1561, 1608, 1627, 1663, 1746, 1747, 1902, 2095, 2132]. **diminishing** [1212, 1214]. **diodes** [38]. **Dirac** [216, 545, 1850, 1867, 2271]. **Direct** [689, 920, 715, 1164, 1243, 1500]. **direction** [342, 593, 652, 651]. **directional** [381]. **directions** [1139]. **Dirichlet** [1127, 16, 198, 204, 549, 816, 949, 959, 1126, 1124, 1687, 1755, 1857, 1965]. **Dirichlet-to-Neumann** [204]. **disc** [1234]. **discontinuities** [496, 497]. **discontinuity** [142]. **Discontinuous** [331, 456, 674, 977, 1080, 1305, 1665, 2181, 29, 36, 122, 126, 127, 150, 180, 211, 251, 370, 432, 433, 445, 490, 498, 521, 525, 532, 541, 617, 599, 600, 646, 647, 658, 660, 673, 695, 795, 813, 819, 884, 891, 926, 982, 1076, 1085, 1083, 1081, 1079, 1173, 1204, 1304, 1306, 1307, 1327, 1416, 1439, 1444, 1447, 1461, 1491, 1506, 1524, 1545, 1569, 1613, 1651, 1683, 1732, 1731, 1787, 1790, 1794, 1796, 1967, 1974, 2057, 2204, 2274, 2285, 749, 748]. **discovered** [1199]. **discrepancy** [1405]. **Discrete** [61, 113, 148, 290, 334, 506, 761, 957, 956, 969, 1410, 1443, 1547, 2211, 4, 14, 44, 89, 91, 120, 161, 159, 206, 212, 262, 272, 315, 332, 369, 397, 419, 465, 514, 617, 629, 666, 762, 786, 791, 800, 805, 834, 869, 887, 934, 946, 955, 992, 998, 1038, 1136, 1217, 1247, 1294, 1328, 1342, 1398, 1422, 1441, 1466, 1503, 1553, 1554, 1590, 1668, 1713, 1766, 1767, 1908, 2002, 2015, 2034, 2055, 2091, 2100, 2110, 2134, 2269, 2279, 752]. **discrete-time** [946]. **Discretising** [68]. **Discretization** [30, 410, 937, 1151, 1708, 1757, 1782, 2028, 23, 46, 58, 79, 89, 113, 200, 204, 265, 295, 312, 311, 307, 313, 317, 319, 424, 432, 433, 431, 436, 446, 542, 719, 807, 825, 844, 845, 865, 876, 882, 883, 907, 983, 1067, 1165, 1172, 1175, 1238, 1249, 1344, 1346, 1353, 1359, 1420, 1421, 1467, 1469, 1468, 1484, 1492, 1581, 1629, 1637, 1638, 1655, 1710, 1714, 1717, 1728, 1741, 1792, 1798, 1799,

1803, 1825, 1839, 1874, 1883, 1915, 1916, 1917, 1963, 1969, 2016, 2029, 2054, 2198, 2193, 720]. **Discretizations** [2140, 6, 29, 87, 146, 258, 272, 391, 439, 486, 545, 549, 586, 585, 816, 925, 1012, 1057, 1101, 1123, 1152, 1278, 1283, 1286, 1304, 1335, 1470, 1483, 1494, 1606, 1662, 1706, 2078, 2164, 2274, 749, 750, 1350, 2160]. **discretized** [51, 472, 504, 1049, 1135]. **Discretizing** [587, 636]. **discs** [700]. **disk** [296]. **dispersion** [1374]. **dispersion-managed** [1374]. **dispersive** [365, 1222, 1524, 1813]. **Displacement** [1302, 769]. **dissimilar** [2061]. **dissipation** [465]. **dissipative** [1231, 1313, 1334, 1488, 2219]. **Dissipativity** [1324]. **dissolving** [1318]. **distance** [1968, 2216]. **distributed** [188]. **distribution** [996, 1064, 2143]. **div** [1012, 1023, 1580, 1900]. **Divergence** [482, 1019, 89, 170, 220, 965, 1024, 1056, 1202, 1580, 1582, 1851, 1956, 2280]. **Divergence-conforming** [482, 1024]. **divergence-free** [220, 965, 1056, 1202, 1580, 1582, 1851, 1956, 2280]. **Divergence-preserving** [1019]. **diverse** [2026]. **divide** [1695]. **divide-and-conquer** [1695]. **Divided** [1731, 705]. **do** [1888, 2099]. **do-one-then-do-the-other** [2099]. **Domain** [1123, 2076, 2132, 15, 138, 148, 204, 321, 336, 474, 480, 557, 725, 802, 805, 879, 947, 980, 1051, 1066, 1105, 1207, 1231, 1317, 1524, 1563, 1557, 1640, 1642, 1654, 1765, 1804, 2014, 2016, 2067, 2263, 2271, 2286]. **domains** [34, 37, 129, 130, 132, 170, 169, 178, 209, 279, 448, 607, 625, 889, 905, 958, 1035, 1049, 1233, 1379, 1397, 1449, 1473, 1642, 1886, 1742, 1745, 1766, 1767, 1825, 1863, 1929, 1956, 1965, 2223, 2297, 2175]. **dominated** [195, 1189, 1561, 1826]. **Donaldson** [1952]. **Doppler** [1676]. **double** [411, 482, 1298, 1515, 1819]. **double-diffusive** [482]. **double-well** [1819]. **doubling** [920, 1193]. **doubly** [1742]. **Douglas** [594, 1908]. **downdating** [1980]. **DPG** [1029]. **drift** [378, 516, 567, 565, 1067, 1086, 1790, 1805]. **drift-diffusion** [516, 567, 565]. **drift-flux** [1067]. **drifts** [615]. **driven** [530, 550, 566, 1295, 1475, 1619]. **drops** [1251]. **drying** [431]. **DtN** [1396, 2189]. **DtN-type** [2189]. **Dual** [2131, 353, 968, 1522, 1818, 1923]. **Dual-primal** [2131]. **duality** [89, 91, 1136]. **due** [1254]. **dumbbell** [250]. **Dynamic** [31, 66, 67, 281, 430, 528, 661, 1236, 1284, 1485, 1528, 1736, 1797, 1963, 1990, 1955]. **dynamical** [337, 587, 1324]. **Dynamics** [6, 216, 472, 642, 945, 952, 1110, 1354, 1355, 1471, 1541, 2142].

E-based [10]. **EBT** [1204]. **Eckhoff** [1891]. **eddy** [10, 304, 303, 696, 790, 1946, 1957, 2054]. **edge** [135, 1396, 1617, 1621, 2009, 2131, 721]. **edged** [1965]. **edges** [129]. **Editorial** [104, 853, 2118, 1781]. **Editorship** [854, 1369]. **educational** [644]. **effect** [506, 622, 938, 2273]. **effective** [861, 951, 1842]. **Effects** [699, 115, 1413, 2043]. **Efficiency** [1109, 355, 1045]. **Efficient** [378, 916, 1265, 1430, 1510, 1536, 2022, 2023, 2095, 744, 1087, 1099, 1190, 2057, 2084]. **efficiently** [1061]. **eigenelement** [1505]. **eigenpairs** [343]. **eigenproblems** [1868]. **eigenstructure** [1590]. **eigensystems** [2104]. **Eigenvalue** [15, 411, 703, 86, 279, 322, 336, 357, 359, 358, 450, 473, 518, 602, 637, 641, 872, 1017, 1037, 1048, 1058, 1075, 1098, 1099, 1222, 1399, 1433, 1434, 1490, 1536, 1593, 1718, 1723, 1721, 1722, 1730, 1769, 1890, 2101, 2184, 2207, 2237, 2246, 2252]. **eigenvalues** [95, 397, 401, 421, 588, 728, 770, 1036, 1397, 1490, 1645, 1723, 1815, 1941, 2105, 2106]. **eigenvectors** [2105]. **eikonal** [943]. **Elastic** [1909, 218, 252, 254, 255, 372, 536, 577, 717,

980, 1668]. **elasticae** [2002]. **Elasticity** [1121, 363, 532, 538, 656, 966, 1024, 1132, 1522, 1618, 1778, 2203, 2225, 2247]. **elasto** [1787]. **elasto-acoustics** [1787]. **elastoacoustic** [138]. **elastodynamics** [115, 122, 1096]. **elastoplastic** [305]. **electric** [328, 904]. **electrical** [410, 1404, 1429]. **electrically** [392]. **electroless** [1107]. **electrolytes** [202]. **Electromagnetic** [1393, 1122, 1222, 1813]. **electron** [1471]. **electronic** [1576]. **electrophysiology** [78]. **electrostatic** [700]. **Element** [736, 1387, 16, 18, 32, 36, 33, 37, 43, 44, 55, 59, 57, 62, 69, 78, 86, 87, 93, 121, 123, 124, 129, 128, 135, 134, 140, 141, 147, 166, 167, 168, 170, 169, 172, 181, 200, 213, 215, 219, 220, 222, 238, 239, 240, 241, 242, 226, 225, 243, 235, 229, 230, 231, 232, 228, 249, 233, 234, 236, 264, 272, 277, 278, 279, 293, 295, 302, 304, 309, 308, 312, 311, 318, 320, 323, 327, 331, 339, 345, 358, 372, 396, 409, 410, 415, 430, 435, 445, 489, 491, 496, 497, 498, 501]. **element** [522, 520, 530, 533, 544, 538, 543, 541, 542, 578, 586, 585, 595, 620, 606, 602, 625, 626, 632, 639, 658, 674, 707, 728, 760, 759, 768, 769, 772, 786, 794, 796, 818, 837, 840, 850, 868, 869, 879, 884, 891, 907, 909, 904, 910, 911, 905, 919, 930, 933, 950, 959, 958, 960, 980, 985, 981, 984, 1019, 1021, 1036, 1047, 1054, 1056, 1051, 1058, 1064, 1066, 1070, 1069, 1071, 1085, 1083, 1082, 1093, 1106, 1113, 1126, 1127, 1124, 1125, 1132, 1194, 1195, 1225, 1229, 1230, 1238, 1247, 1252, 1253, 1267, 1268, 1284, 1285, 1287, 1305]. **element** [1306, 1310, 1314, 1327, 1376, 1380, 1388, 1394, 1396, 1398, 1399, 1400, 1404, 1411, 1424, 1432, 1436, 1443, 1449, 1454, 1457, 1462, 1463, 1470, 1482, 1493, 1498, 1506, 1508, 1514, 1520, 1522, 1525, 1529, 1527, 1539, 1540, 1544, 1551, 1559, 1569, 1580, 1554, 1563, 1557, 1555, 1572, 1581, 1586, 1601, 1602, 1618, 1629, 1633, 1641, 1640, 1649, 1665, 1681, 1682, 1688, 1713, 1718, 1726, 1729, 1724, 1730, 1735, 1749, 1751, 1778, 1777, 1786, 1798, 1799, 1804, 1809, 1814, 1819, 1830, 1839, 1851, 1857, 1860, 1861, 1874, 1883, 1900, 1901, 1924, 1931, 1939, 1940, 1949, 1955, 1957, 1965, 1970, 1972, 1973, 1976, 1979, 1988, 2006]. **element** [2017, 2018, 2045, 2075, 2091, 2093, 2092, 2107, 2122, 2124, 2131, 2165, 2198, 2182, 2183, 2184, 2193, 2208, 2246, 2247, 2257, 2265, 2290, 2287, 2296, 2299, 723, 721, 2175]. **element-finite** [1514]. **elements** [35, 165, 174, 208, 301, 359, 416, 525, 544, 540, 553, 556, 645, 734, 849, 875, 893, 944, 966, 1008, 1038, 1037, 1063, 1141, 1144, 1202, 1237, 1251, 1393, 1412, 1450, 1483, 1486, 1535, 1595, 1621, 1749, 1750, 1792, 1816, 1914, 1956, 1977, 2000, 2038, 2089, 2286, 722, 274, 275]. **elimination** [531, 626, 1142, 1834, 2081, 2260]. **Elliott** [1952]. **Elliott-Donaldson** [1952]. **ellipses** [692]. **elliptic** [4, 54, 60, 92, 93, 118, 165, 213, 238, 240, 241, 242, 237, 339, 341, 366, 385, 386, 435, 440, 443, 461, 462, 489, 511, 518, 522, 520, 561, 564, 619, 600, 624, 674, 684, 726, 725, 759, 796, 818, 837, 840, 848, 847, 864, 907, 909, 921, 927, 977, 1022, 1058, 1081, 1084, 1098, 1099, 1113, 1126, 1127, 1171, 1180, 1195, 1226, 1282, 1305, 1304, 1306, 1307, 1327, 1383, 1418, 1439, 1443, 1452, 1458, 1519, 1540, 1624, 1644, 1683, 1687, 1746, 1765, 1791, 1890, 1948, 2045, 2093, 2092, 2125, 2243, 2263, 2266, 2278, 2298, 720, 749, 748]. **elliptic-hyperbolic** [837]. **emanating** [338]. **embedded** [496, 828, 829]. **embedding** [1370, 1877]. **embeddings** [470]. **empirical** [1065]. **enclosures** [50]. **End** [270]. **endpoint** [1895]. **endpoints** [1030]. **Energy** [330, 1212, 1411, 88, 534, 718, 809, 811, 1037, 1074, 1151, 1178, 1313, 1328, 1572, 1599, 1819, 2110, 2124, 2180, 2219, 2285, 2296]. **energy-based** [2124, 2285]. **energy-conserving** [811].

Energy-corrected [1411]. **energy-dependent** [718]. **Energy-diminishing** [1212]. **energy-dissipative** [1313]. **Energy-preserving** [330, 1178, 2180]. **energy-stable** [2296]. **enhanced** [2141]. **enhancement** [294, 1193, 1731]. **Enhancing** [2237]. **Enlarged** [48]. **enriched** [654, 891, 1265]. **Enright** [1269]. **ensemble** [1189]. **ensemble-proper** [1189]. **ensembles** [1190]. **ensuring** [929]. **enthalpy** [861, 903, 1559, 2084, 2173]. **enthalpy-type** [2084]. **Entries** [97, 1358, 1954]. **entropy** [1096, 1422, 1929, 2279]. **Envelope** [1100, 1]. **enveloping** [1680]. **environment** [886]. **epidemic** [1622]. **equal** [1054, 1064]. **equal-order** [1054]. **equality** [622, 1700, 1779]. **equality-constrained** [622]. **equally** [1864]. **equation** [1, 6, 8, 27, 46, 44, 49, 50, 58, 76, 75, 112, 120, 123, 126, 127, 140, 150, 158, 160, 163, 162, 165, 182, 194, 196, 200, 203, 216, 219, 223, 277, 295, 300, 313, 328, 391, 412, 415, 424, 423, 447, 457, 472, 504, 506, 514, 530, 526, 545, 553, 556, 562, 577, 578, 583, 595, 607, 599, 596, 597, 629, 636, 648, 660, 666, 673, 687, 699, 704, 718, 719, 727, 736, 771, 790, 794, 801, 811, 816, 833, 834, 862, 865, 867, 868, 879, 886, 911, 917, 919, 935, 939, 943, 945, 949, 948]. **equation** [969, 982, 983, 999, 1022, 1043, 1066, 1073, 1074, 1082, 1092, 1119, 1123, 1135, 1148, 1165, 1178, 1180, 1183, 1191, 1192, 1205, 1207, 1224, 1233, 1234, 1236, 1276, 1293, 1294, 1325, 1323, 1322, 1348, 1351, 1374, 1407, 1401, 1425, 1430, 1492, 1497, 1512, 1517, 1529, 1528, 1527, 1534, 1549, 1570, 1566, 1562, 1575, 1581, 1595, 1612, 1626, 1632, 1645, 1659, 1682, 1696, 1701, 1714, 1715, 1727, 1739, 1763, 1782, 1786, 1795, 1792, 1794, 1793, 1797, 1812, 1817, 1847, 1879, 1883, 1898, 1915, 1924, 1962, 1985, 1989, 2006, 2004, 2005, 2014, 2041, 2042, 2048, 2134, 2177, 2196, 2187, 2206, 2217]. **equation** [2219, 2224, 2236, 2242, 2257, 2255, 2261, 2287, 2297, 2302, 2303, 722, 274]. **Equations** [30, 1387, 11, 14, 29, 41, 42, 40, 65, 74, 79, 87, 118, 122, 124, 125, 128, 136, 137, 161, 159, 166, 168, 170, 175, 181, 184, 183, 191, 193, 197, 201, 207, 209, 212, 215, 214, 238, 239, 240, 241, 242, 226, 244, 272, 283, 284, 289, 294, 299, 302, 306, 309, 312, 314, 313, 315, 317, 318, 324, 329, 331, 330, 346, 351, 350, 352, 364, 365, 369, 377, 378, 396, 422, 428, 442, 446, 452, 455, 454, 458, 456, 460, 465, 466, 467, 495, 502, 510, 519, 527, 533, 534, 541, 555, 567]. **equations** [566, 575, 574, 573, 579, 584, 616, 617, 604, 594, 598, 626, 630, 634, 645, 686, 688, 702, 706, 707, 726, 725, 745, 747, 754, 759, 766, 785, 787, 796, 807, 820, 825, 839, 843, 844, 850, 849, 869, 871, 876, 889, 890, 893, 895, 896, 905, 921, 926, 927, 928, 954, 958, 960, 961, 973, 980, 984, 1007, 1010, 1023, 1024, 1031, 1039, 1042, 1047, 1054, 1055, 1056, 1071, 1100, 1111, 1128, 1129, 1133, 1146, 1147, 1145, 1152, 1173, 1175, 1179, 1184, 1186, 1185, 1193, 1203, 1215, 1216, 1221, 1227, 1232, 1238, 1248, 1260, 1259, 1267, 1269, 1282]. **equations** [1281, 1279, 1283, 1284, 1286, 1291, 1295, 1297, 1304, 1316, 1313, 1334, 1344, 1353, 1354, 1371, 1375, 1376, 1380, 1384, 1390, 1391, 1392, 1396, 1398, 1409, 1408, 1410, 1418, 1417, 1420, 1442, 1440, 1441, 1448, 1444, 1451, 1458, 1459, 1469, 1468, 1470, 1471, 1474, 1487, 1489, 1494, 1498, 1507, 1514, 1518, 1519, 1524, 1530, 1531, 1535, 1553, 1564, 1585, 1568, 1561, 1577, 1578, 1569, 1554, 1567, 1557, 1583, 1587, 1590, 1588, 1596, 1606, 1615, 1611, 1609, 1619, 1618, 1613, 1634, 1635, 1636, 1637, 1638, 1644, 1650, 1651, 1648, 1653, 1661, 1662, 1667, 1668, 1669, 1670, 1672, 1674, 1695, 1697, 1698, 1709, 1710, 1712]. **equations** [1719, 1728, 1736, 1751, 1755, 1756, 1758, 1757, 1776, 1778, 1777, 1780, 1791, 1796,

1808, 1810, 1827, 1830, 1859, 1860, 1861, 1862, 1866, 1875, 1877, 1897, 1906, 1927, 1930, 1931, 1936, 1940, 1942, 1949, 1950, 757, 1972, 1974, 1983, 1984, 1987, 1991, 1992, 1997, 2007, 2012, 2015, 2024, 2029, 2032, 2040, 2039, 2044, 2052, 2049, 2050, 2051, 2058, 2059, 2069, 2072, 2071, 2076, 2078, 2085, 2111, 2112, 2127, 2130, 2133, 2149, 2188, 2201, 2191, 2180, 2197, 2189, 2192, 2208, 2212, 2226, 2228, 2243, 2240, 2245, 2256, 2262, 2278, 2282, 2285, 2299, 2301, 2305, 750, 1349, 2116, 2160, 2156, 2155]. **equations** [1188]. **equidistributing** [2259]. **equidistribution** [563]. **equilateral** [1338]. **Equilibrated** [925, 585, 697, 696, 1812]. **equilibration** [415]. **equilibration-based** [415]. **equilibria** [2012]. **Equilibrium** [1998, 51, 243, 867, 1255, 1541, 2016]. **equipped** [863]. **equispaced** [164, 851, 1003]. **Equivalence** [924, 1855, 1867, 2250, 2251]. **equivalence-preserving** [1867]. **Errata** [668, 852, 1670]. **Erratum** [83, 400, 476, 895, 1027, 1258, 1433, 1591, 1722, 1766, 2074, 2249, 722, 394]. **Error** [27, 44, 59, 93, 94, 132, 180, 198, 215, 257, 256, 318, 379, 441, 505, 512, 524, 548, 595, 613, 648, 673, 687, 701, 903, 935, 1039, 1148, 1236, 1240, 1286, 1400, 1472, 1517, 1561, 1604, 1648, 1662, 1754, 1820, 1832, 1833, 1872, 1920, 1924, 1925, 1936, 757, 1971, 2003, 2006, 2030, 2087, 2090, 2179, 2269, 2270, 750, 26, 32, 34, 36, 33, 37, 75, 116, 117, 119, 121, 127, 130, 131, 137, 140, 141, 145, 166, 216, 219, 229, 231, 236, 251, 278, 308, 314, 316, 317, 357, 415, 424, 434, 430, 468, 482, 487, 488, 491, 508]. **error** [511, 541, 545, 554, 620, 614, 604, 600, 603, 610, 633, 634, 659, 695, 697, 696, 735, 760, 770, 782, 785, 802, 808, 813, 814, 815, 819, 825, 826, 830, 888, 890, 909, 919, 925, 985, 988, 1011, 1037, 1047, 1055, 1059, 1064, 1085, 1081, 1082, 1079, 1084, 1095, 1098, 1106, 1119, 1124, 1128, 1151, 1173, 1188, 1196, 1238, 1262, 1270, 1283, 1284, 1304, 1306, 1334, 1342, 1389, 1395, 1403, 1406, 1409, 1408, 1431, 1440, 1441, 1451, 1454, 1457, 1466, 1478, 1479, 1480, 1491, 1498, 1499, 1500, 1501, 1502, 1504, 1508, 1509, 1514, 1539, 1549, 1573, 1584, 1598, 1601]. **error** [1606, 1610, 1621, 1643, 1651, 1661, 1666, 1674, 1690, 1702, 1712, 1715, 1738, 1760, 1761, 1778, 1812, 1817, 1831, 1834, 1840, 1848, 1853, 1858, 1865, 1898, 1915, 1919, 1940, 1944, 1948, 1984, 2028, 2033, 2075, 2100, 2103, 2106, 2122, 2166, 2178, 2195, 2205, 2185, 2199, 2219, 2244, 2236, 2271, 2272, 2281, 2292, 2299, 2301, 748, 752, 2159, 2152, 2184, 265]. **Errors** [2163, 1035, 1237, 1685, 1743, 1873, 2172, 2266, 2273]. **ESPIRA** [784]. **ESPRIT** [784]. **Essential** [360, 1687]. **estimate** [27, 121, 317, 496, 620, 610, 613, 813, 841, 909, 1119, 1499, 1560, 1589, 1601, 2166, 2272, 2301]. **Estimates** [286, 1760, 1761, 26, 44, 93, 94, 130, 132, 131, 141, 145, 166, 212, 239, 241, 256, 265, 272, 278, 379, 390, 469, 487, 491, 505, 511, 545, 548, 595, 604, 600, 603, 648, 687, 701, 735, 782, 802, 815, 816, 919, 925, 924, 935, 951, 985, 1011, 1039, 1041, 1047, 1085, 1106, 1124, 1128, 1151, 1163, 1173, 1188, 1196, 1236, 1262, 1284, 1342, 1395, 1403, 1442, 1440, 1441, 1447, 1454, 1466, 1472, 1479, 1480, 1498, 1500, 1501, 1514, 1573, 1584, 1598, 1594, 1621, 1643, 1651, 1648, 1661, 1674, 1724, 1731, 1754, 1778, 1817, 1848, 1858, 1915, 1924, 1936, 1944]. **estimates** [757, 1978, 1984, 1990, 2006, 2033, 2075, 2087, 2090, 2100, 2103, 2106, 2122, 2134, 2191, 2184, 2219, 2244, 2271, 2270, 2299, 752]. **Estimating** [1030]. **estimation** [59, 92, 130, 357, 420, 488, 508, 633, 696, 784, 826, 830, 1407, 1457, 1504, 1508, 1509, 1585, 1606, 1666, 1702]. **estimator** [137, 434, 468, 585, 695, 697, 1812, 1865, 2178]. **estimators** [550, 1451, 1889]. **Euclidean** [783]. **Euler** [76, 295, 346, 596, 615, 694, 1094, 1203, 1248, 1260, 1297, 1521, 1553, 1583, 1600, 1709, 1741, 1801, 1805, 1808, 1866, 2198].

Euler-type [1709, 1741]. **Eulerian** [1557, 1804, 2188, 2191, 2175]. **Evaluation** [716, 1309, 160, 266, 268, 386, 546, 698, 773, 1087, 1298, 1414, 1801, 1828, 1833, 1959]. **evolution** [74, 87, 210, 244, 351, 702, 771, 839, 1125, 1243, 1279, 1390, 1714, 1715, 2078]. **evolutionary** [29, 785, 866, 1011, 1227]. **evolutions** [248]. **evolving** [875, 876, 879, 880, 912, 905, 1125, 1482, 1483, 1484, 1557, 1638, 1804]. **Exact** [367, 594, 1303, 1959, 640, 1112, 1464, 1616, 1925, 1991, 2015, 2095]. **exactly** [1851]. **exactness** [448]. **example** [2275]. **exchange** [648]. **Existence** [971, 1416, 678, 1409, 1910]. **exit** [1289]. **exp** [349]. **expansion** [1003, 1499, 1604, 1762, 2187]. **expansion-contraction** [1762]. **expansions** [21, 429, 475, 932, 1339, 1366, 1367, 1712, 1982, 476]. **Expected** [993]. **experiments** [292]. **Explicit** [1578, 2258, 2280, 5, 42, 40, 71, 125, 508, 586, 898, 1055, 1165, 1166, 1270, 1390, 1600, 1653, 1691, 1846, 1934, 2073, 2074, 1577]. **exploiting** [1045]. **exploration** [1993]. **exponent** [198, 1588]. **Exponential** [1280, 2008, 2007, 64, 209, 351, 350, 414, 500, 560, 596, 625, 671, 923, 954, 1291, 1332, 1357, 1374, 1455, 1515, 1562, 1617, 1629, 1667, 1691, 1699, 1726, 1725, 1776, 1847, 2032, 2033, 2041, 2204, 2174]. **exponential-fitting** [671, 2041]. **exponential-type** [1562]. **Exponentially** [1075, 619, 1130, 1728, 2042, 2097, 2291]. **exponentially-fitted** [2042]. **exponentials** [2214]. **expressed** [73]. **extended** [1009, 2150]. **Extending** [667]. **extensible** [2018]. **extension** [900, 1092, 1449, 2128, 2254, 753]. **extensions** [995, 1754]. **exterior** [215, 448, 498, 700, 930, 949, 947, 2095]. **external** [1941]. **extrapolation** [856, 946, 1116, 1300, 1382, 1505, 1595, 1846, 1936, 2022, 2023, 2036, 2179].

Faber [1863]. **fabrication** [1219, 1218]. **face** [893, 721]. **factor** [1178, 1652]. **factorization** [72, 371, 570, 576, 663, 852, 857, 855, 1947, 1277, 1458, 1775, 1966, 1980, 755]. **factorization-related** [1458]. **factorizations** [1118]. **factors** [1288, 1942, 2080, 2288]. **Falk** [2272]. **falling** [41]. **Families** [827, 2226]. **family** [35, 344, 566, 1412, 1511, 1829, 2170, 2191, 2289, 2290]. **far** [1397]. **Fast** [9, 266, 268, 386, 429, 931, 932, 1005, 1077, 1097, 1272, 1807, 2085, 2135, 2186, 2234, 2297, 175, 271, 344, 368, 1091, 1156, 1217, 1346, 1414, 1518, 1823, 1888, 1935, 2047, 2108]. **fBms** [800]. **FE** [1875]. **features** [51, 1329]. **FEEC** [534]. **Feedback** [1172, 2256]. **Fejér** [900, 901]. **Fem** [1656, 10, 76, 75, 92, 203, 209, 326, 444, 461, 462, 511, 539, 536, 537, 561, 847, 888, 947, 956, 972, 1044, 1048, 1725, 1727, 1728, 2008, 2236]. **FEM-BEM** [972]. **FENE** [233, 234]. **FENE-P** [233, 234]. **Fermi** [50]. **ferromagnetic** [2054]. **FETI** [2131]. **few** [1435]. **FFT** [1217, 1881]. **FFT-based** [1217]. **FFTRR** [1091]. **FFTRR-based** [1091]. **Fickian** [264]. **fictitious** [947, 1765]. **fidelity** [906]. **Fiedler** [758]. **field** [246, 237, 328, 390, 620, 648, 913, 904, 1454, 1466, 1584, 1582, 1597, 1598, 1614, 2087, 2269, 2292]. **fields** [177, 700, 965, 1108, 1397, 1558, 1681]. **Fife** [1466]. **fifth** [1598]. **fifth-order** [1598]. **filament** [2062]. **fill** [852, 857]. **film** [41, 228]. **Filon** [2249, 815, 1663, 2187, 2248]. **Filon-type** [2249, 2187, 2248]. **filters** [2102]. **finance** [1274]. **Finding** [779, 1533, 1667, 758]. **Finite** [13, 16, 46, 134, 172, 242, 243, 235, 230, 232, 234, 264, 279, 291, 320, 339, 372, 405, 443, 497, 517, 530, 564, 760, 875, 879, 904, 911, 950, 1051, 1069, 1106, 1113, 1144, 1261, 1284, 1285, 1380, 1387, 1388, 1436, 1449, 1529, 1527,

1641, 1783, 1809, 1819, 1866, 1979, 2010, 2093, 2092, 3, 7, 18, 25, 32, 35, 36, 33, 37, 43, 44, 55, 59, 57, 62, 69, 86, 87, 90, 93, 124, 129, 128, 133, 135, 140, 141, 147, 165, 166, 167, 174, 181, 200, 213, 215, 217, 219, 220, 222, 238, 239, 240].
finite
[241, 226, 225, 229, 231, 228, 249, 236, 267, 272, 277, 278, 281, 293, 295, 302, 301, 304, 312, 311, 318, 323, 331, 333, 332, 345, 359, 358, 361, 364, 365, 406, 409, 410, 415, 416, 430, 435, 433, 489, 491, 496, 505, 506, 516, 528, 533, 544, 540, 538, 543, 541, 542, 553, 556, 557, 558, 567, 565, 566, 583, 586, 585, 588, 589, 595, 620, 602, 632, 639, 643, 645, 651, 661, 674, 686, 687, 707, 728, 734, 738, 759, 772, 773, 786, 794, 796, 799, 837, 841, 840, 844].
finite
[850, 868, 869, 884, 891, 894, 893, 900, 907, 909, 914, 910, 905, 919, 921, 933, 935, 936, 939, 938, 942, 959, 958, 960, 976, 980, 985, 981, 984, 1000, 1002, 1008, 1021, 1036, 1038, 1037, 1047, 1052, 1054, 1056, 1060, 1063, 1064, 1066, 1070, 1071, 1085, 1083, 1082, 1126, 1127, 1124, 1125, 1141, 1194, 1195, 1223, 1225, 1229, 1230, 1237, 1238, 1247, 1251, 1252, 1253, 1293, 1294, 1296, 1305, 1306, 1310, 1314, 1313, 1321, 1360, 1376, 1394, 1396, 1398, 1399, 1400, 1404, 1411, 1418, 1417, 1421, 1422, 1424, 1432, 1443, 1450, 1454, 1457, 1460, 1462, 1463, 1470, 1474].
finite
[1475, 1482, 1483, 1486, 1493, 1498, 1506, 1508, 1514, 1520, 1522, 1525, 1535, 1539, 1540, 1551, 1559, 1556, 1579, 1577, 1578, 1569, 1580, 1554, 1563, 1557, 1555, 1572, 1581, 1586, 1595, 1602, 1618, 1629, 1633, 1640, 1643, 1649, 1657, 1655, 1654, 1665, 1681, 1682, 1688, 1718, 1719, 1726, 1729, 1724, 1735, 1743, 1749, 1750, 1751, 1763, 1786, 1792, 1797, 1798, 1799, 1804, 1811, 1814, 1816, 1826, 1830, 1839, 1851, 1857, 1860, 1861, 1874, 1883, 1900, 1901, 1924, 1931, 1939, 1940, 1949, 1957, 1956, 1965, 1970, 1972, 1973, 1976, 1977, 1988, 2000, 2006, 2017, 2018, 2030, 2038, 2045, 2063, 2075, 2087, 2088, 2090, 2091].
finite [2096, 2107, 2122, 2124, 2131, 2165, 2171, 2173, 2196, 2198, 2193, 2208, 2217, 2238, 2247, 2265, 2266, 2267, 2271, 2270, 2272, 2286, 2290, 2287, 2296, 2299, 2306, 720, 722, 274, 2175, 233, 1218].
Finite-difference [443, 2010, 7, 361, 588, 589, 942, 1293, 1418, 1417, 1657, 1655, 1654, 1763, 1792, 2087, 2173]. **finite-dimensional** [643, 1460, 1218]. **Finite-element** [134, 242, 243, 264, 1106, 1113, 1529, 1527, 1809, 2093, 2092, 36, 86, 93, 135, 213, 215, 238, 239, 240, 241, 226, 225, 228, 278, 304, 312, 409, 410, 489, 496, 620, 632, 759, 837, 884, 909, 910, 960, 1070, 1195, 1238, 1247, 1252, 1306, 1399, 1454, 1463, 1470, 1520, 1522, 1539, 1559, 1581, 1633, 1749, 1751, 1798, 1799, 1814, 1839, 1883, 1901, 1931, 1965, 1973, 2017, 2018, 2045, 2075, 2124, 2131, 2208].
finite-element-based [200]. **finite-part** [773, 799, 914, 1556, 2096, 2238].
finite-range [1579]. **finite-sum** [281].
Finite-volume
[405, 564, 90, 410, 567, 565, 632, 661, 738, 837, 844, 936, 1052, 1321, 1422, 1797, 2266].
Finite-volume-element [339]. **First** [322, 979, 2079, 23, 289, 386, 456, 457, 538, 543, 581, 895, 896, 1145, 1361, 1604, 1636, 1709, 2050, 2051]. **first-kind** [457].
First-Order
[979, 2079, 23, 538, 543, 895, 896, 1361, 1604].
fits [225]. **Fitted**
[240, 864, 23, 1321, 2042, 2196]. **fitting** [671, 689, 692, 709, 742, 797, 798, 2041].
FitzHugh [78]. **fix** [1871]. **fixed** [344, 760, 1035, 1743, 2073, 2074, 2161].
Fletcher [47, 729, 898]. **Flexible** [712, 626].
floating [978, 1287, 1309]. **floating-point** [978, 1309]. **flow** [25, 35, 59, 69, 221, 247, 236, 252, 258, 257, 307, 393, 394, 432, 433, 528, 612, 657, 761, 877, 885, 908, 939, 982, 992, 1049, 1050, 1070, 1072, 1125, 1190, 1228, 1285, 1314, 1416, 1438, 1446, 1532, 1545, 1586, 1819, 1909, 1932, 2008, 2164, 2292].
flow-box [1050]. **flow-erratum** [394]. **flows**

[45, 41, 43, 245, 316, 345, 482, 552, 609, 674, 916, 1057, 1076, 1091, 1189, 1328, 1503, 1580, 1633, 2009, 2091]. **fluid** [59, 134, 221, 877, 985, 988, 987, 1051, 1070, 1072, 1572, 1874, 1970, 2164]. **fluid-fluid** [1572]. **fluid-structure** [988, 1051, 1874, 1970]. **fluidized** [640]. **fluids** [317, 552, 769, 1285, 1799, 1939, 2091, 1798]. **Flux** [1967, 223, 239, 241, 488, 621, 654, 696, 925, 1067, 1308, 1335, 1447, 1500, 1929, 2075]. **Flux-stability** [1967]. **fluxes** [1724, 1812]. **Fock** [1471]. **focused** [516]. **Fokker** [1313, 1322, 1793]. **folding** [256]. **following** [20]. **forces** [228, 1867]. **Forchheimer** [62, 555, 769]. **forcing** [58, 428, 1322]. **form** [149, 446, 860, 1251, 1288, 1519, 1633, 2060]. **formal** [77]. **formalism** [636]. **forms** [581, 934]. **formula** [164, 212, 364, 559, 743, 1515, 2047, 2108, 2157, 2238]. **formulae** [42, 296, 551, 763, 799, 827, 828, 829, 996, 1221, 1303, 1660, 1716, 1872, 1933, 1952, 2072, 2071]. **formulas** [206, 480, 515, 1002, 1009, 1112, 1472, 1837, 2109, 2110]. **formulation** [79, 96, 221, 251, 300, 309, 323, 336, 377, 446, 501, 554, 555, 909, 904, 1046, 1051, 1071, 1133, 1255, 1571, 1718, 1777, 1823, 1900, 1950, 2078, 2148, 2173, 2180]. **formulations** [249, 322, 391, 697, 696, 816, 861, 1059, 1151, 1207, 1494]. **forth** [886]. **Fortin** [33]. **forward** [288, 1610, 1743, 1757, 1944]. **forward-backward** [1610, 1944]. **FOSLS** [1046]. **foundations** [887]. **Four** [2052, 2027, 2041]. **four-step** [2041]. **Fourier** [452, 727, 974, 976, 1253, 1301, 1363, 1366, 1548, 1650, 1694, 1753, 1801, 1879, 1982, 2055, 2108, 2137, 2197]. **Fourier-finite-element** [1253]. **Fourier-series** [727]. **Fourth** [361, 290, 291, 588, 602, 768, 844, 997, 1081, 1113, 1160, 1566, 1672, 1732, 1735, 2042, 2053, 2285]. **Fourth-order** [361, 290, 291, 588, 602, 768, 844, 997, 1081, 1113, 1160, 1566, 1672, 1732, 1735, 2053, 2285]. **Fox** [97, 853]. **fractal** [647]. **fractals** [17]. **Fractional** [1476, 1636, 9, 16, 49, 116, 114, 148, 320, 366, 375, 376, 426, 479, 514, 530, 603, 634, 848, 847, 972, 1067, 1182, 1295, 1322, 1400, 1432, 1436, 1440, 1441, 1459, 1516, 1528, 1537, 1599, 1715, 1727, 1728, 1794, 1796, 1793, 2088, 2299]. **fractional-order** [1715]. **fractional-step** [1440, 1441]. **fractionally** [1432]. **fractions** [386, 716]. **fracture** [432]. **fractured** [432, 431, 529, 1545]. **fragmentation** [13]. **frame** [726, 2077]. **frames** [682]. **framework** [713, 714, 1231, 1566, 2281]. **Francis** [1120]. **Fredholm** [161, 289, 459, 703, 1215, 1410, 1698]. **free** [12, 36, 220, 351, 350, 363, 580, 622, 623, 675, 762, 889, 965, 1008, 1023, 1056, 1138, 1202, 1319, 1386, 1568, 1580, 1582, 1586, 1618, 1620, 1679, 1788, 1835, 1851, 1900, 1956, 2064, 2218, 2225, 2280, 2293]. **free-boundary** [12]. **freedom** [196]. **frequencies** [453]. **frequency** [194, 205, 381, 810, 878, 1035, 1061, 1093, 1268, 1663]. **frequency-dependent** [878]. **frequency-independent** [1268]. **frictional** [218]. **frictionless** [31]. **friendly** [2036]. **front** [1559, 1967]. **front-tracking** [1559]. **fronts** [1040]. **FSI** [96]. **Full** [30, 1764, 424, 694, 825, 1244, 1662, 1979, 2193]. **full-discretization** [424, 2193]. **Fully** [4, 206, 272, 786, 869, 1342, 2091, 44, 62, 120, 370, 615, 666, 769, 800, 834, 1071, 1247, 1294, 1308, 1441, 1503, 1554, 1571, 1668, 1713, 1944, 2100, 2279, 752]. **fully-coupled** [370]. **function** [309, 386, 477, 546, 684, 743, 1003, 1004, 1032, 1097, 1265, 1357, 1455, 1464, 1537, 1594, 1752, 1777, 1878, 1888, 1920, 1950, 2109, 2244]. **function-evaluation** [546]. **Functional** [1955, 332, 460, 502, 973, 1216, 2305]. **functionals** [659, 860, 1740, 1907, 2103]. **functions** [22, 70, 71, 77, 156, 266, 282, 349, 420, 429,

451, 474, 571, 611, 624, 682, 712, 715, 764, 763, 774, 797, 845, 863, 873, 918, 1001, 1030, 1130, 1139, 1162, 1169, 1206, 1298, 1345, 1348, 1372, 1495, 1526, 1537, 1607, 1620, 1646, 1684, 1745, 1788, 1789, 1828, 1835, 1872, 1888, 1953, 1993, 2025, 2036, 2110, 2157, 2209, 2211, 2235]. **fundamental** [1282, 1437, 1899]. **furnace** [304]. **Further** [28, 289, 1831, 2144]. **FV** [1875]. **FV-FE** [1875].

G [344]. **Gagliardo** [506]. **Galerkin** [23, 29, 36, 65, 74, 79, 122, 124, 125, 126, 127, 144, 150, 161, 166, 175, 180, 195, 211, 227, 251, 294, 299, 300, 326, 331, 341, 370, 445, 446, 456, 490, 498, 521, 525, 532, 541, 573, 578, 617, 612, 599, 600, 624, 629, 646, 647, 658, 659, 674, 673, 695, 735, 787, 795, 813, 817, 819, 878, 884, 891, 926, 946, 977, 982, 1018, 1053, 1076, 1085, 1083, 1080, 1081, 1079, 1146, 1173, 1181, 1305, 1304, 1306, 1323, 1392, 1410, 1416, 1424, 1432, 1439, 1461, 1491, 1498, 1499, 1506, 1519, 1524, 1528, 1545]. **Galerkin** [1564, 1602, 1613, 1644, 1651, 1648, 1649, 1665, 1683, 1732, 1731, 1738, 1749, 1784, 1786, 1787, 1794, 1796, 1807, 1821, 1857, 1860, 1861, 1894, 1913, 1914, 1972, 1974, 2001, 2004, 2008, 2052, 2050, 2051, 2057, 2069, 2078, 2134, 2181, 2204, 2192, 2207, 2274, 2285, 748]. **Galerkin-based** [370]. **Galerkin-Chebyshev** [1564]. **Galerkin-finite** [124]. **Galerkin-like** [2001]. **games** [379, 1614]. **Gamma** [374, 386]. **Gamma-convergent** [374]. **GAOR** [2202]. **gap** [466]. **gas** [882, 883, 1110]. **gauge** [636, 1648, 1649]. **Gauss** [354, 493, 952, 1288, 1754, 1837, 1907, 2072, 2071, 2108, 2135, 2216]. **Gauss-type** [2072, 2071]. **Gaussian** [112, 154, 177, 247, 298, 531, 808, 863, 1108, 1242, 1699, 1707, 1739, 1752, 1834, 1872, 2081, 2138]. **Gaver** [1513]. **Gegenbauer** [2185]. **GenEO** [380]. **general** [25, 91, 406, 492, 586, 616, 630, 654, 768, 792, 818, 844, 860, 921, 937, 1325, 1322, 1334, 1514, 1588, 1853, 1878, 1927, 1930, 1956, 2112, 2293]. **general-order** [1878]. **generalization** [575, 677, 706, 1373, 1431, 1760, 1761]. **Generalizations** [1673]. **Generalized** [463, 799, 940, 1352, 1490, 1623, 2206, 145, 208, 317, 324, 345, 1024, 1026, 1140, 1240, 1347, 1425, 1449, 1472, 1579, 1759, 1851, 2194, 2219, 649]. **generated** [515]. **generates** [1103]. **generating** [571]. **generation** [1172, 2259]. **generator** [1647]. **genesis** [1120]. **Gennes** [1665]. **Geodesic** [1977, 1969]. **geodesics** [2161]. **Geometric** [458, 1186, 1316, 24, 183, 244, 887, 900, 1183, 1341, 2009]. **Geometrically** [1716, 445]. **geometries** [468, 1122, 1518]. **Geometry** [675, 1148, 1263, 2161]. **Gevrey** [1628]. **Gibbs** [20]. **Gilbert** [75, 200, 203, 790, 865]. **give** [1035]. **given** [935, 1001]. **Givens** [812]. **gives** [781]. **Glimm** [1040]. **Glimm-like** [1040]. **Global** [71, 179, 399, 400, 457, 508, 826, 830, 1270, 1300, 2033, 2126, 2172, 47, 924, 1026, 1102, 1158, 1281, 1331, 1420, 1504, 2085, 2284, 2229]. **global-best** [924]. **globally** [261, 1299, 1390]. **GMRES** [48, 185, 2121]. **GMWB** [1330]. **Goal** [696]. **Goal-oriented** [696]. **Golub** [1676]. **good** [1562, 1702]. **Gordon** [2090, 2271, 636, 1961, 2133, 2180]. **Gottlieb** [1891]. **governed** [919]. **governing** [2196]. **Grad** [1012]. **Grad-div** [1012]. **graded** [131, 868]. **Gradient** [417, 432, 431, 838, 1520, 43, 51, 82, 89, 143, 184, 245, 258, 263, 347, 609, 618, 695, 731, 732, 841, 887, 898, 953, 986, 1057, 1125, 1212, 1328, 1373, 1389, 1519, 1551, 1686, 1819, 1922, 1938, 2043, 2169, 2237, 2284]. **gradient-like** [51, 609]. **gradient-multigrid** [2169]. **gradients** [715, 1240]. **grading** [129, 1062]. **Gram** [1103]. **graph** [943, 1271, 1909]. **Graphs** [1956, 147, 481]. **Green** [845]. **Gregory** [1775]. **Grid** [438, 267, 306, 518, 563, 918, 1001, 1172,

1299, 1608, 1657, 1943, 2227, 938]. **grids** [53, 141, 582, 862, 1008, 1136, 1162, 1163, 1206, 1591, 1931, 1951, 2287]. **Gross** [811, 872, 1037, 1073]. **ground** [953]. **groundwater** [1586]. **Group** [1558, 931, 1195, 2250]. **groups** [1170, 2035, 2190]. **growing** [1654]. **growth** [427, 524, 615, 842, 880, 986, 1502, 831]. **Grünwald** [2067]. **GSVD** [336]. **Guaranteed** [814, 1948, 2166, 697, 1037, 1330]. **guarantees** [1428, 1838, 2268]. **guard** [1832]. **Gummel** [1997]. **Gupta** [727]. **Gurtin** [421]. **gyrokinetic** [331]. **gyrokinetic-waterbag** [331].

H [1580, 787, 1023]. **Haar** [2227]. **Hadamard** [773, 914, 1556, 2096]. **Hahn** [2047]. **half** [765, 1600, 1846, 2049]. **half-explicit** [1600, 1846]. **half-line** [765, 2049]. **Hall** [2158]. **Hamilton** [443, 465, 1380, 1387, 1751]. **Hamiltonian** [598, 642, 665, 810, 1488, 1506, 1547, 1611, 1882, 1999]. **Hammerstein** [1042, 1507]. **hand** [48, 2094, 2121]. **Handling** [710, 720]. **hanging** [36]. **Hankel** [643, 1358]. **Hardy** [2109, 2110]. **harmonic** [114, 257, 625, 697, 696, 1069, 1569, 1613, 1653, 1946, 2019, 2020]. **harmonically** [879]. **Hartree** [1471]. **having** [688]. **HDG** [139, 604, 655, 657, 656, 704, 1023, 1024, 1631, 1632, 1769, 1927, 1928, 2061, 2140, 616]. **heat** [32, 58, 120, 123, 257, 295, 313, 410, 533, 595, 596, 699, 1071, 1128, 1492, 1727, 1915]. **Heath** [1496]. **heating** [1388]. **heavy** [368]. **Hele** [909]. **Helfrich** [1151]. **Helfrich-type** [1151]. **Hellan** [2177]. **Helmholtz** [205, 315, 381, 391, 607, 704, 816, 1032, 1092, 1123, 1348, 1392, 1730, 1786, 2059, 2106, 2236, 2246]. **hemivariational** [717, 950, 1226]. **Hermite** [153, 801, 952, 1000, 1073, 1675, 1774, 1775, 1971, 2147]. **Hermite-based** [1000]. **Hermite-type** [801]. **Hermitian** [189, 1017, 2099]. **Herrmann** [2177]. **Hessian** [281, 1022, 1519, 2064, 2231]. **Hessian-free** [2064]. **Hessian-vector** [2064]. **Hessians** [638, 1241]. **Heston** [68, 1741]. **Heterogeneous** [453, 4, 433, 654, 792, 937, 1092, 1123, 1148, 1982]. **hexagons** [1141]. **hexahedral** [301]. **HHO** [1930]. **Hierarchical** [205, 527, 934, 438, 469, 1292, 1659]. **hierarchically** [1695]. **High** [53, 300, 391, 509, 590, 591, 645, 754, 828, 829, 1328, 1482, 1668, 1763, 1816, 2247, 2279, 21, 122, 205, 351, 350, 365, 383, 420, 488, 485, 532, 549, 580, 822, 834, 843, 878, 925, 927, 1035, 1060, 1061, 1093, 1123, 1171, 1211, 1243, 1256, 1315, 1337, 1338, 1366, 1367, 1525, 1540, 1544, 1663, 1777, 2093, 2092, 2180, 2197, 2189, 2236, 2234, 2270, 552]. **High-accuracy** [590, 591]. **high-contrast** [488]. **High-dimensional** [645, 2247, 1171, 2180, 2197]. **high-frequency** [205, 878, 1035, 1061, 1093, 1663]. **High-order** [300, 391, 754, 828, 829, 1328, 1482, 1668, 1763, 1816, 2279, 122, 351, 350, 365, 383, 485, 549, 580, 822, 834, 843, 925, 927, 1060, 1123, 1243, 1256, 1315, 1540, 1544, 2093, 2092, 2189, 2234, 2270, 552]. **Higher** [29, 983, 1289, 1474, 1483, 265, 761, 811, 1116, 1497, 1977, 2021, 2170, 2203, 2267, 2160]. **Higher-order** [29, 1289, 1474, 265, 811, 1116, 2021, 2203, 2267, 2160]. **highly** [433, 453, 459, 466, 580, 665, 810, 815, 1363, 1364, 1591, 1835, 1986, 2187, 2248, 2249]. **highly-oscillating** [1363, 1364]. **Hilbert** [144, 1114, 1742, 1882, 1958, 2126, 2138]. **Hilliard** [613, 786, 1527, 49, 150, 232, 794, 1153, 1205, 1236, 1461, 1575, 1599, 1736, 1797, 2219]. **Hilliard-Stokes** [613]. **HJB** [634]. **Hodge** [377, 1032, 1825]. **HODIE** [651]. **hodograph** [962, 964]. **Hölder** [693, 796, 1086, 1932]. **Hölder-norm** [796].

Holm [2206]. **holomorphic** [664]. **homoclinic** [338, 1016, 1978, 1995]. **Homogeneous** [1631, 1632, 999]. **homogenization** [810, 2168]. **homogenized** [886]. **homotopy** [641, 766, 858]. **Hood** [224, 438]. **Hopf** [587, 1147, 1164, 1697, 2241]. **horizons** [1577, 1578]. **Householder** [2136]. **hp** [2007, 209, 821, 924, 1728, 2192, 888, 1725, 1727, 2008, 2009]. **hp-DGFEM** [2007, 2009]. **hp}-FEM** [209, 1728, 888, 1727, 2008]. **hp}-optimal** [821]. **hp}-version** [2192]. **HSS** [187]. **human** [24]. **Hybrid** [549, 561, 700, 994, 1669, 1670, 1762, 1970, 432, 485, 822, 843, 884, 885, 927, 937, 1544, 2013, 2274, 552]. **hybrid-dimensional** [432]. **hybridizable** [532, 600, 819]. **hybridized** [1461, 1545]. **hydro** [370]. **hyper** [971]. **hyper-singular** [971]. **Hyperbolic** [999, 342, 403, 404, 568, 628, 672, 686, 821, 823, 837, 935, 1266, 1353, 1384, 1417, 1421, 1731, 1972, 2063, 2073, 2074, 2129]. **hyperbolics** [1361]. **hypercube** [570]. **hyperelastic** [2028]. **hyperinterpolation** [1234]. **hypersingular** [527, 577, 629, 1267]. **hypocoercivity** [334]. **hysteresis** [2167].

identification [1679]. **identity** [1038]. **II** [21, 169, 209, 226, 674, 830, 871, 910, 1088, 1099, 1159, 1219, 1359, 1364, 1914, 2009, 2023, 2072, 2093, 2171]. **III** [1367, 1625]. **ill** [173, 2097]. **ill-conditioned** [173, 2097]. **IMA** [591, 829, 895, 1670, 2074, 2249, 668]. **image** [906]. **images** [2020]. **IMEX** [790, 1962, 2219]. **IMEX-RK** [1962]. **IMEX-type** [790]. **immersed** [96, 1194, 1195, 1326, 1394]. **impact** [708, 1910, 1945]. **impedance** [208, 649, 1069, 1404, 1429]. **implementation** [19, 185, 1339, 1382, 1935, 2095]. **implemented** [1803]. **Implicit** [558, 1674, 2058, 2173, 45, 41, 42, 40, 190, 295, 302, 317, 342, 479, 492, 495, 509, 513, 551, 648, 681, 680, 759, 907, 956, 1007, 1055, 1100, 1178, 1227, 1248, 1297, 1302, 1391, 1597, 1637, 1662, 1792, 1848, 1981, 1983, 2016, 2027, 2113, 2198, 2193]. **implicit-explicit** [40, 1055]. **implicitly** [1720, 2091]. **implies** [2086]. **imposition** [363]. **Improved** [216, 841, 1124, 1827, 2220, 199, 231, 1011, 2254, 2151]. **improvement** [394, 509, 1458]. **Improving** [168, 2154, 1505, 1515]. **including** [135, 1932]. **inclusion** [448, 902]. **inclusions** [1555, 1744]. **incompatible** [992]. **incomplete** [1855]. **incompressible** [35, 136, 316, 317, 363, 534, 552, 769, 820, 843, 916, 966, 988, 987, 1056, 1076, 1091, 1203, 1227, 1228, 1248, 1281, 1297, 1416, 1522, 1553, 1633, 1798, 1799, 1866, 1927, 1928, 1930, 2009, 2007, 2058, 2091]. **Increasing** [1774]. **indefinite** [380, 855, 1947, 1686, 1700, 2076]. **indentation** [255]. **indenting** [235]. **independent** [88, 171, 1108, 1268, 1614]. **Index** [98, 100, 102, 105, 107, 109, 653, 1469, 1531, 1587, 1701, 1846, 2012, 2031]. **indicator** [308, 1081, 1304]. **induction** [304, 1474, 1592]. **industry** [1174]. **inequalities** [82, 117, 179, 249, 332, 806, 1144, 1261, 1499, 1870, 1885, 1951, 2107, 2114]. **inequality** [506, 614, 717, 907, 909, 950, 1113, 1226, 1290]. **Inertial** [2160, 1610]. **Inexact** [347, 371, 2268, 47, 146, 282, 281, 367, 605, 594, 713, 783, 1017, 1044, 1176, 2232]. **inextensible** [252, 254, 259]. **Inf** [438, 1522, 224, 323, 1238, 1706, 750]. **Inf-sup** [438, 1522, 1238, 1706]. **Infinite** [1002, 643, 693, 1185, 1577, 1578, 1685, 1992, 2036, 2044, 2297]. **infinite-dimensional** [2044]. **Infinite-order** [1002]. **infinitely** [1878]. **infinity** [1574]. **inflation** [2028]. **inflow** [1514]. **inflow/outflow** [1514]. **information** [281]. **informed** [928, 1760, 1761, 757, 2281]. **Ingersoll** [53, 694]. **inhomogeneous** [954, 1400, 2079].

initial [63, 64, 346, 403, 404, 406, 545, 603, 628, 765, 1101, 1333, 1375, 2170, 2192, 2245, 2159, 2152, 2153]. **initial-** [406]. **initial-boundary** [603, 765]. **initial-value** [2170, 2153]. **inner** [1433, 1434]. **inpainting** [1558]. **input** [303]. **instability** [2043, 2086]. **Instance** [1493]. **integral** [154, 161, 159, 163, 207, 283, 289, 328, 335, 390, 391, 454, 458, 456, 459, 457, 502, 515, 527, 548, 575, 574, 573, 577, 607, 629, 703, 706, 747, 801, 806, 816, 917, 971, 1042, 1087, 1146, 1145, 1179, 1207, 1267, 1323, 1351, 1371, 1392, 1410, 1489, 1523, 1531, 1534, 1549, 1567, 1588, 1635, 1636, 1696, 1698, 1709, 1712, 1823, 1897, 1942, 1987, 1991, 2024, 2052, 2049, 2050, 2051, 2072, 2071, 2076, 2187, 2220, 2228, 2261, 2116, 2156]. **integrals** [386, 581, 698, 773, 799, 815, 860, 914, 1001, 1298, 1303, 1363, 1364, 1556, 1710, 1895, 2036, 2096, 2238]. **integrated** [1432]. **integrating** [63, 64, 1178]. **integration** [19, 183, 284, 514, 524, 551, 793, 863, 867, 887, 1053, 1065, 1078, 1117, 1147, 1212, 1395, 1430, 1452, 1471, 1496, 1716, 1835, 2021, 2227]. **integrator** [182, 203, 447, 526, 701, 702, 790, 856, 1847, 2204, 2242, 2256]. **integrator-based** [2204]. **integrators** [5, 351, 350, 389, 466, 500, 509, 665, 811, 923, 1213, 1264, 1291, 1300, 1488, 1536, 1547, 1546, 1562, 1629, 1711, 1821, 1867, 1999, 2026, 2113, 2142]. **integro** [175, 1010, 1043, 1215, 1316, 1528, 1587, 1651, 1669, 1670, 1795, 1860, 1862, 1940, 1972, 2111, 2228, 2282]. **integro-differential** [175, 1010, 1043, 1215, 1316, 1528, 1587, 1651, 1669, 1670, 1795, 1860, 1940, 1972, 2111, 2228]. **integrodifferential** [197, 455]. **integroparabolic** [8]. **intensities** [303]. **interacting** [214, 615, 1909, 2269]. **interaction** [134, 615, 985, 988, 1051, 1204, 1310, 1311, 1579, 1572, 1874, 2241]. **interactions** [157]. **interest** [1496]. **interface** [431, 489, 488, 485, 486, 497, 819, 1060, 1195, 1326, 1346, 1540, 1581, 1642, 2045]. **interfaces** [240, 432, 912, 937, 1970]. **Interior** [489, 1173, 220, 434, 487, 601, 817, 982, 1056, 1085, 1083, 1118, 1180, 1331, 1397, 1545]. **Interior-penalty-stabilized** [489]. **interlocking** [663]. **intermediate** [2290]. **interpolant** [477, 776]. **interpolants** [1159, 1689, 1696, 1697, 1854, 1888, 2056]. **interpolate** [1357]. **interpolated** [595]. **interpolating** [61, 1864, 2147]. **Interpolation** [408, 464, 496, 742, 873, 1621, 2035, 721, 130, 152, 164, 267, 418, 451, 471, 547, 606, 675, 676, 737, 775, 774, 777, 874, 922, 963, 962, 965, 970, 997, 1003, 1014, 1065, 1131, 1161, 1275, 1379, 1413, 1426, 1537, 1675, 1678, 1692, 1734, 1820, 1856, 1918, 1971, 2066, 2223, 2244, 2291]. **interpolations** [2295]. **Interpolatory** [2096, 270, 1170, 2250]. **interval** [650, 764, 1409, 1556, 2150]. **introduced** [1359]. **introduction** [1647]. **invariance** [1020, 1428, 1429]. **invariant** [405, 424, 2101]. **inverse** [559, 608, 641, 942, 968, 969, 971, 1017, 1025, 1144, 1209, 1242, 1720, 1760, 1954, 1966, 2046]. **inverse-type** [1144]. **inverses** [1481, 2146]. **Inversion** [846, 1143, 449, 1800, 1958]. **inverting** [1815]. **investigation** [1625]. **involutive** [1603, 2141]. **involved** [852, 857]. **Involving** [1272, 116, 262, 859, 1705, 2137]. **IRK** [1026]. **irregular** [1745, 1805, 1808, 2103, 1364]. **irreversible** [754]. **iso** [1557]. **iso-parametric** [1557]. **isoclinal** [1708]. **Isogeometric** [436, 439, 119, 438, 468, 631, 1292]. **isolated** [50]. **isometry** [258]. **Isoparametric** [86, 1021, 449, 964]. **isothermal** [1454]. **Isotropic** [1387, 177, 1209]. **Itô** [1289]. **Iterated** [1146, 362, 454, 1358, 1921]. **iterates** [509]. **iteration** [189, 188, 187, 253, 681, 713, 973, 1009, 1017, 1145, 1340, 1530, 1548, 1720, 2105, 2159].

iterations [344, 1592, 2043]. **Iterative** [684, 895, 896, 1273, 1405, 2034, 756, 149, 151, 271, 297, 689, 784, 916, 1113, 1197, 1458, 1477, 1807, 1989, 2164, 2263, 2264]. **iteratively** [354]. **IV** [1337].

J [591, 668, 829, 895, 1670, 2074]. **Jacobi** [1380, 1387, 1751, 429, 443, 465, 836, 2047, 2138]. **Jacobi/elliptic** [443]. **Jacobian** [708, 1244]. **Jarrow** [1496]. **Jin** [2016]. **John** [111, 1120]. **Johnson** [2177]. **Jordan** [39, 901]. **Joule** [506, 1388]. **Journal** [2249]. **jump** [1853, 788]. **jumps** [2298]. **June** [111].

Kamel [1269]. **Kantorovich** [1198, 2190]. **Kármán** [541]. **KdV** [2242]. **Keller** [333, 1095, 1313, 1973]. **kernel** [719, 801, 1204, 1795, 1958, 1987, 2050, 2051, 2187, 2223, 2255]. **kernels** [408, 455, 473, 575, 610, 1567, 1707, 2111]. **kind** [56, 161, 283, 289, 386, 456, 457, 1146, 1145, 1323, 1410, 1636, 1698, 1709, 1872, 2052, 2050, 2051, 2116, 2156]. **kinetic** [334, 378, 2130]. **Kirchhoff** [206, 2177, 2183]. **Klein** [636, 1961, 2090, 2133, 2180, 2271]. **knots** [851, 1319, 1620, 1788, 1864]. **Kohn** [871]. **Kolmogorov** [664]. **Korteweg** [687, 834, 1094, 1294, 1512, 1847, 2004]. **Kronrod** [1754]. **Krylov** [970, 1201, 1720, 1891]. **Kublanovskaya** [1120]. **Kuramoto** [8, 41, 583, 1626]. **Kuramoto-Sakaguchi** [8]. **Kutta** [827, 828, 829, 2027, 2074, 193, 207, 283, 479, 494, 508, 509, 513, 551, 681, 677, 678, 679, 680, 826, 830, 834, 876, 1166, 1220, 1270, 1312, 1324, 1356, 1504, 1611, 1691, 1821, 1848, 1934, 1983, 1998, 2012, 2042, 2073, 2170, 2221, 2282, 1349, 2156, 2150, 2174]. **Kutta-composition** [834]. **Kutta-type** [1611].

L [1284, 1640]. **L-shaped** [1640]. **L.** [97]. **L.M.F.** [572]. **L.M.F.-based** [572]. **l.s.d** [2144]. **L1** [1661]. **Lagrange** [96, 119, 195, 294, 300, 359, 358, 362, 489, 849, 1275, 1379, 1542, 1675, 1913, 1914, 2147]. **Lagrangian** [85, 299, 783, 1150, 1244, 1343, 1494, 1557, 1923, 2188, 2191]. **Lagrangians** [995, 1532]. **Laguerre** [1339, 1886, 1697, 2206]. **Laguerre-type** [1339]. **Lambert** [1981]. **Lamé** [1812]. **laminar** [1438]. **Lanczos** [1345, 1868]. **Landau** [865, 76, 75, 200, 203, 648, 790, 1119, 1665]. **landscape** [740]. **Landweber** [1025]. **Landweber-type** [1025]. **Langevin** [1478, 1541, 1758]. **Langevin-type** [1758]. **LAPACK** [1273]. **Laplace** [158, 490, 625, 833, 969, 1376, 1714, 1715, 1958, 2029, 2059]. **Laplacian** [1027, 90, 116, 277, 377, 426, 772, 1028, 1516, 1538, 1574, 1815, 1825]. **Laplacians** [1230]. **Large** [566, 282, 373, 374, 594, 920, 1137, 1398, 1399, 1568, 1676, 1723, 1721, 1722, 1868, 2040, 2235, 2298]. **large-scale** [594, 920, 1137, 1568, 1721, 1722, 2040]. **Large-time** [566, 1399]. **largest** [1433, 1434]. **later** [1120]. **lateral** [1909]. **lattice** [510, 636, 1647]. **Laurent** [1694]. **law** [194, 405, 424, 1095]. **laws** [26, 142, 568, 583, 647, 683, 1015, 1214, 1257, 1258, 1266, 1308, 1445, 1447, 1475, 1476, 1731, 1738, 1967, 2010, 2030, 2063, 2129, 2279]. **Lawson** [63, 1847]. **Lawson-type** [1847]. **Lax** [642, 1627, 2128]. **Layer** [1605, 1061, 2132]. **Layer-adapted** [1605]. **layers** [1617, 1726]. **LBB** [1182]. **LCP** [1331]. **LDG** [373, 374]. **leading** [1873, 2143]. **leapfrog** [1352]. **learning** [481, 582, 1594, 1803]. **Least** [691, 780, 1750, 2288, 173, 280, 322, 416, 570, 650, 688, 692, 709, 994, 1519, 1569, 1620, 1676, 1700, 1745, 1759, 1844, 1843, 1996, 2008, 2079, 2094, 2222, 2276]. **Least-change** [2288]. **Least-squares** [691, 173, 322, 416, 570, 650, 692, 709, 1519, 1745, 1996, 2094]. **Lebesgue** [724, 1208, 1379, 2115]. **leg** [1183]. **Legendre**

[1217, 1309, 1564, 1886, 1696, 1878, 2106]. **Legendre-Laguerre** [1886]. **Leja** [1379, 2115]. **length** [209]. **Leray** [839, 1189]. **Leslie** [853]. **Letnikov** [2067]. **level** [608, 653, 933, 939, 1384, 1439, 1719, 1822, 2031, 2114, 2246, 2257]. **level-index** [653, 2031]. **Levenberg** [1542]. **Levin** [155]. **Lévy** [1475, 2108]. **lexicographic** [1288]. **library** [1828]. **Lie** [66, 560, 785, 1170, 1711, 2190, 2250]. **Lie-algebraic** [560]. **Lifschitz** [865]. **Lifshitz** [75, 200, 203, 790, 1119, 76, 648]. **like** [51, 552, 609, 1040, 1272, 1564, 1565, 1931, 146, 1359, 2001]. **limit** [1002, 2090]. **limited** [156, 710, 711, 1176]. **limited-memory** [156]. **limiting** [372, 1130, 1335]. **Limits** [943, 477, 1675, 2269]. **Lindelöf** [1340]. **line** [47, 574, 622, 623, 765, 1341, 2049, 2135]. **Linear** [196, 556, 790, 1121, 1140, 1703, 2086, 2152, 27, 31, 48, 60, 63, 64, 82, 87, 95, 94, 144, 145, 149, 163, 173, 175, 186, 184, 188, 203, 210, 249, 256, 267, 291, 295, 297, 351, 350, 360, 402, 461, 462, 492, 498, 519, 532, 538, 558, 570, 614, 617, 602, 599, 615, 628, 650, 656, 659, 685, 688, 711, 716, 731, 736, 745, 771, 774, 818, 821, 824, 833, 874, 916, 921, 932, 1024, 1026, 1031, 1053, 1105, 1114, 1142, 1149, 1176, 1181, 1215, 1242, 1250, 1273, 1277, 1279, 1280, 1306, 1331, 1325, 1334, 1353, 1382, 1421, 1423]. **linear** [1440, 1457, 1477, 1530, 1538, 1551, 1575, 1602, 1605, 1618, 1620, 1634, 1636, 1637, 1658, 1666, 1676, 1681, 1685, 1732, 1740, 1743, 1757, 1764, 1829, 1843, 1873, 1874, 1885, 1902, 1907, 1915, 1943, 1992, 1996, 2032, 2039, 2053, 2054, 2094, 2141, 2205, 2198, 2204, 2199, 2209, 2210, 2212, 2217, 2236, 2247, 2255, 2260, 2275, 2286, 2303, 831, 1350, 1625]. **linear-quadratic** [1915]. **Linearization** [43, 73, 2147, 1593, 2058]. **linearized** [1151, 1527, 1804]. **Linearly** [45, 41, 1178, 1637, 1981, 218, 479, 956, 1802, 1848, 2113, 2193]. **lines** [2305]. **linogram** [1896]. **Lions** [557, 839, 1642]. **Liouville** [290, 343, 401, 942, 1030, 1090, 1160, 1300, 1920]. **Lipschitz** [15, 481, 1169, 1390, 1583, 2193, 2223]. **liquid** [1665, 1735]. **Lissajous** [387, 922]. **Littlewood** [2158]. **loading** [377]. **loads** [927]. **Lobatto** [2072]. **Lobatto-Chebyshev** [2072]. **Local** [30, 152, 733, 989, 990, 1035, 1292, 1706, 2066, 2222, 2244, 136, 280, 355, 418, 457, 469, 498, 525, 529, 599, 673, 785, 795, 888, 924, 986, 1204, 1331, 1415, 1451, 1583, 1610, 1717, 1732, 2285, 750]. **local-** [924]. **Locality** [1003]. **Localization** [355, 944, 2185]. **Localized** [293, 1500, 1966, 1287, 2188]. **locally** [36, 926, 1169, 1206, 2166]. **locating** [77]. **location** [744, 1911]. **locations** [1515]. **Locking** [2018, 2225, 1618, 2293]. **Locking-free** [2225, 1618, 2293]. **locus** [192]. **Log** [611, 349, 1452, 1741, 1838]. **log-barrier** [1838]. **log-Heston** [1741]. **log-normal** [1452]. **log-sum-exp** [349]. **logarithm** [931, 968]. **logarithmic** [1987, 2050, 2051]. **logarithmic-kernel** [1987]. **logging** [1979]. **Long** [1018, 1111, 1421, 2100, 196, 216, 1074, 2018]. **Long-term** [1111]. **Long-time** [1018, 2100, 196, 216, 1074]. **longtime** [1898]. **loosely** [486]. **Lorentz** [1648]. **loss** [978]. **lossy** [194]. **Low** [1094, 1395, 1562, 1895, 1976, 59, 72, 136, 176, 182, 205, 447, 526, 699, 734, 814, 1277, 1314, 1580, 1595, 1616, 1674, 2145, 2242, 721]. **low-** [205]. **Low-order** [1895, 1976, 59, 136, 734, 1314, 1580, 721]. **low-rank** [72, 176, 814, 1277, 1616, 2145]. **low-regularity** [182, 447, 526, 2242]. **Lower** [1084, 1037, 2038, 2304]. **lowers** [2213]. **lowest** [224, 818, 2294]. **lowest-order** [818, 2294]. **lumped** [1077, 1814]. **Lyapunov** [1224, 1720, 2044, 2172]. **Lyness** [77].

M [344, 407]. **m-DDFV** [407]. **M/G/1** [344]. **M/G/1-type** [344]. **MAC** [1106, 1674]. **MacCamy** [421]. **Mach** [1094, 1674]. **Maclaurin** [1801]. **macro** [966]. **macroelement** [439]. **magic** [1065]. **magnetic** [1474, 1582]. **magnetodynamic** [697]. **magnetohydrodynamics** [820, 843, 1928]. **magnetostriction** [203]. **Magnus** [351, 350, 702, 1536]. **Magnus-type** [702]. **majorant** [989, 990]. **MALA** [388]. **Malliavin** [1803]. **managed** [1374]. **manifold** [619, 783, 1318, 1704, 2016, 2251]. **manifold-based** [619]. **manifold-valued** [2251]. **manifolds** [24, 190, 248, 399, 400, 742, 767, 847, 990, 1169, 1223, 1362, 1415, 1560, 1624, 1768, 1773, 1809, 1897, 2218, 2160]. **many** [970]. **map** [204, 257]. **mapping** [569, 1034, 1473, 1549]. **mappings** [664, 899, 2019, 2020, 2046, 2190]. **maps** [114, 1515, 1687]. **Maratos** [622]. **marching** [1227, 1935]. **Markov** [344, 662, 1530, 1543]. **Markovian** [2112]. **Marquardt** [1542]. **Martingale** [1889]. **Maruyama** [1521, 1583, 1805, 1808]. **Mason** [1856]. **Mass** [534, 150, 1033, 1067, 1077, 1133, 1612, 1609, 1814, 1932, 2207]. **mass-preserving** [1612, 1609]. **matching** [557]. **material** [1218]. **materials** [218, 1813, 2054]. **Mathematical** [1122, 1255]. **matrices** [39, 167, 286, 381, 412, 575, 592, 608, 627, 641, 691, 855, 1947, 971, 1143, 1211, 1320, 1365, 1647, 1708, 1905, 2081, 2099, 2146, 2161, 2162, 2202, 2215, 2233, 2235, 2258, 755, 758]. **Matrix** [593, 846, 1723, 28, 52, 73, 186, 205, 230, 371, 384, 432, 560, 708, 852, 857, 968, 971, 973, 1041, 1088, 1132, 1192, 1241, 1276, 1274, 1341, 1345, 1385, 1409, 1408, 1487, 1592, 1616, 1733, 1919, 1923, 1954, 2025, 2039, 2046, 2145, 2147, 2194, 2207, 2213, 2229, 2302, 2303, 2304]. **matrix-fracture** [432]. **matrix-inverse** [2046]. **Maximal** [1484, 1554, 480]. **Maximum** [42, 131, 782, 825, 1479, 1715, 1952, 957, 956, 1443, 1606, 2283]. **maximum-minimum** [956]. **Maximum-norm** [1715, 1606]. **Maxwell** [357, 359, 358, 365, 396, 517, 636, 645, 697, 849, 869, 1069, 1173, 1396, 1524, 1569, 1590, 1613, 1648, 1653, 1649, 1931, 2148]. **Maxwell-type** [645]. **McKean** [214, 615, 1583, 1944, 831]. **Mean** [599, 236, 345, 913, 908, 939, 982, 1341, 1503, 1614, 2087, 2269]. **mean-field** [2269]. **Mean-square** [599]. **means** [92, 1942]. **measure** [405, 863]. **measurements** [285, 1242, 1428]. **measures** [13, 808, 1850]. **mechanical** [370, 453, 1600]. **media** [25, 194, 307, 365, 432, 433, 528, 529, 769, 1070, 1072, 1416, 1524, 1545, 1590, 1932]. **medium** [431, 1534]. **Medius** [538]. **Mellin** [1936]. **membrane** [235]. **membranes** [292, 2028]. **memory** [156, 710, 711, 1176, 1185, 1661, 2272]. **Mesh** [2230, 23, 129, 171, 652, 861, 864, 889, 987, 1183, 1196, 1602, 1614, 1655, 1717, 2300]. **mesh-free** [889]. **mesh-independent** [171, 1614]. **Meshes** [1121, 25, 36, 55, 91, 131, 128, 224, 238, 260, 327, 369, 409, 430, 445, 458, 557, 606, 616, 654, 792, 791, 821, 868, 929, 936, 937, 1012, 1144, 1316, 1394, 1508, 1509, 1522, 1605, 1617, 1621, 1641, 1730, 1748, 1927, 1930, 1960, 2009, 2017, 2061, 2089, 2132, 2176, 2237, 2259, 2265, 2266, 2267, 2293]. **Meshing** [89]. **metastable** [535, 2097]. **Method** [30, 1121, 1343, 4, 7, 11, 12, 20, 24, 43, 47, 62, 69, 78, 112, 121, 123, 125, 129, 128, 135, 136, 139, 143, 147, 155, 161, 159, 170, 169, 171, 178, 179, 192, 195, 190, 213, 222, 238, 226, 225, 237, 277, 278, 295, 302, 304, 305, 310, 324, 327, 336, 339, 342, 341, 343, 346, 353, 354, 362, 363, 373, 374, 395, 396, 398, 406, 413, 434, 487, 490, 488, 485, 491, 486, 501, 512, 520, 532, 544, 549, 552, 563, 569, 578, 583, 584, 588, 589, 605, 593, 617, 604, 612, 602, 599, 600].

method
[601, 622, 623, 625, 629, 630, 633, 639, 641, 646, 647, 655, 684, 706, 710, 729, 731, 732, 730, 734, 747, 759, 765, 767, 769, 771, 772, 783, 794, 801, 802, 817, 818, 819, 821, 832, 833, 837, 840, 850, 869, 884, 885, 887, 889, 894, 897, 898, 901, 902, 903, 920, 926, 927, 930, 933, 941, 940, 945, 949, 948, 950, 959, 958, 960, 961, 974, 976, 977, 980, 985, 981, 989, 990, 1008, 1019, 1025, 1029, 1032, 1036, 1041, 1047, 1052, 1053, 1055, 1058, 1061, 1064, 1070, 1071, 1073, 1085, 1089, 1092, 1093, 1102, 1105].
method
[1114, 1119, 1126, 1127, 1131, 1138, 1150, 1157, 1156, 1164, 1173, 1176, 1177, 1180, 1189, 1191, 1197, 1198, 1201, 1204, 1210, 1215, 1216, 1225, 1227, 1229, 1233, 1235, 1247, 1245, 1244, 1252, 1253, 1262, 1267, 1268, 1269, 1287, 1293, 1297, 1296, 1301, 1329, 1326, 1327, 1321, 1330, 1322, 1341, 1347, 1373, 1375, 1382, 1390, 1392, 1394, 1396, 1399, 1404, 1402, 1414, 1416, 1422, 1424, 1425, 1436, 1437, 1446, 1445, 1454, 1458, 1461, 1462, 1465, 1473, 1482, 1487, 1497, 1499, 1501, 1502, 1507, 1518, 1528, 1531, 1539, 1540, 1542, 1549, 1559, 1564, 1565, 1560, 1579, 1569, 1580, 1563, 1586, 1597, 1596, 1602, 1608, 1609].
method
[1616, 1618, 1613, 1614, 1639, 1640, 1642, 1643, 1645, 1644, 1650, 1648, 1649, 1658, 1664, 1677, 1679, 1690, 1695, 1702, 1709, 1713, 1717, 1729, 1732, 1730, 1737, 1738, 1739, 1749, 1762, 1765, 1769, 1777, 1780, 1786, 1790, 1795, 1792, 1794, 1804, 1811, 1814, 1818, 1817, 1838, 1823, 1830, 1841, 1842, 1846, 1851, 1857, 1859, 1863, 1877, 1880, 1890, 1891, 1894, 1898, 1899, 1912, 1913, 1914, 1924, 1925, 1926, 1927, 1928, 1930, 1935, 1938, 1940, 1955, 1967, 1973, 1974, 1976, 1988, 2006, 2019, 2020, 2029, 2036, 2042, 2045, 2052, 2050, 2051, 2053, 2057, 2059, 2061, 2062, 2069, 2084, 2089, 2088, 2090, 2107, 2106].
method [2108, 2114, 2171, 2177, 2201, 2196, 2190, 2206, 2198, 2204, 2184, 2192, 2212, 2216, 2247, 2254, 2252, 2257, 2255, 2264, 2265, 2269, 2278, 2284, 2285, 2294, 2296, 2293, 2292, 2300, 2305, 723, 748, 2174, 2175].
methodology [2]. **Methods**
[560, 846, 1024, 18, 45, 40, 56, 57, 63, 64, 77, 80, 82, 81, 124, 126, 127, 141, 146, 149, 151, 157, 172, 180, 186, 184, 189, 188, 187, 191, 193, 197, 210, 216, 220, 227, 240, 263, 266, 271, 280, 282, 281, 283, 289, 293, 300, 325, 331, 330, 340, 347, 358, 361, 365, 367, 371, 380, 402, 410, 415, 435, 438, 445, 453, 455, 458, 466, 479, 482, 489, 492, 493, 494, 495, 497, 498, 508, 510, 509, 513, 514, 518, 521, 522, 524, 523, 525, 527, 533, 538, 543, 541, 562, 574, 579].
methods
[590, 591, 595, 621, 609, 616, 594, 598, 624, 658, 657, 656, 662, 668, 669, 671, 670, 681, 677, 678, 679, 680, 689, 693, 695, 704, 707, 715, 726, 725, 746, 754, 766, 768, 792, 803, 804, 807, 822, 826, 830, 839, 864, 895, 896, 899, 917, 921, 944, 946, 954, 966, 969, 973, 980, 982, 984, 986, 987, 994, 1005, 1013, 1011, 1022, 1023, 1026, 1034, 1056, 1078, 1083, 1080, 1091, 1109, 1118, 1153, 1154, 1158, 1166, 1178, 1184, 1183, 1194, 1203, 1208, 1219, 1218, 1230, 1254, 1270, 1289, 1296, 1302, 1306, 1310, 1312, 1314, 1324, 1325, 1323].
methods
[1333, 1334, 1360, 1352, 1354, 1356, 1359, 1362, 1370, 1371, 1376, 1400, 1410, 1411, 1430, 1428, 1435, 1438, 1439, 1463, 1491, 1493, 1498, 1506, 1512, 1516, 1520, 1523, 1525, 1529, 1534, 1538, 1544, 1545, 1568, 1577, 1578, 1554, 1567, 1584, 1557, 1555, 1574, 1587, 1589, 1591, 1598, 1615, 1611, 1626, 1630, 1634, 1636, 1651, 1654, 1663, 1665, 1667, 1668, 1669, 1670, 1672, 1673, 1683, 1686, 1688, 1691, 1698, 1703, 1708, 1726, 1724, 1731, 1740, 1743, 1745, 1751, 1758, 1783, 1796, 1802, 1807, 1821, 1822, 1827, 1829, 1848, 1860, 1862, 1866, 1895, 1904, 1920, 1934, 1949, 1964, 1972, 1979, 1981].
methods
[1982, 1987, 1998, 2001, 2004, 2012, 2013, 2015, 2021, 2022, 2023, 2027, 2034, 2040, 2041, 2049, 2063, 2064, 2068, 2073, 2074,

2083, 2085, 2093, 2092, 2111, 2112, 2122, 2126, 2137, 2149, 2164, 2170, 2179, 2188, 2202, 2187, 2181, 2191, 2182, 2183, 2197, 2210, 2220, 2221, 2231, 2243, 2234, 2248, 2249, 2253, 2266, 2267, 2271, 2273, 2274, 2280, 2286, 2282, 2298, 2301, 788, 720, 756, 1349, 2116, 2156, 2150, 2151, 2152, 2155, 2153, 2154, 649]. **methods-overcoming** [1254]. **metric** [82, 579, 714, 2276]. **MHD** [1248, 1582, 1937]. **MHM** [1121]. **MHSS** [188]. **micromagnetism** [866]. **midpoint** [1374, 1662]. **mild** [126, 446]. **mild-weak** [446]. **Milstein** [214, 1086]. **mimetic** [720]. **mini** [168, 1394]. **mini-element** [168]. **minibatch** [368]. **Minimal** [2287, 180, 296, 1382, 1386, 1613, 1785]. **minimax** [745, 1692, 2302]. **minimization** [253, 261, 281, 289, 539, 732, 1154, 1155, 1244, 1464, 1665, 1903, 2011, 2110, 2123, 2126]. **minimizers** [2300]. **minimizing** [282, 1433, 1434]. **minimum** [287, 781, 956, 1296, 1330, 1975]. **Miranda** [1038]. **misaligned** [618]. **miscible** [769]. **Mitchell** [1167]. **Mixed** [72, 309, 736, 1037, 1142, 1681, 1682, 1730, 1751, 1957, 2009, 10, 35, 62, 69, 141, 195, 213, 249, 302, 305, 310, 314, 323, 377, 416, 431, 446, 501, 512, 533, 540, 553, 554, 555, 585, 769, 792, 794, 837, 840, 844, 864, 884, 959, 958, 960, 980, 985, 984, 1042, 1047, 1070, 1071, 1105, 1133, 1380, 1388, 1446, 1457, 1514, 1524, 1584, 1571, 1613, 1724, 1860, 1900, 1928, 2007, 2013, 2078, 2246, 2292]. **mixed-dimensional** [431]. **mixed-primal** [69]. **mixing** [388]. **mobility** [230]. **mode** [157, 1092, 2241]. **model** [13, 24, 68, 78, 229, 230, 231, 234, 256, 304, 311, 307, 333, 334, 346, 356, 372, 382, 431, 516, 528, 543, 558, 565, 620, 632, 640, 842, 880, 913, 904, 906, 981, 1067, 1094, 1095, 1204, 1454, 1496, 1570, 1584, 1571, 1572, 1597, 1598, 1599, 1604, 1622, 1652, 1655, 1681, 1735, 1741, 1861, 1939, 1979, 2016, 2054, 2087, 2203, 2272, 233]. **modeled** [80]. **Modeling** [2064, 1528]. **modelling** [38, 181, 717, 1077, 1973, 2028]. **models** [34, 250, 421, 661, 845, 871, 910, 1087, 1158, 1946, 1963]. **modes** [1263]. **Modification** [1254, 808, 941, 1676]. **modifications** [1872]. **modified** [197, 619, 598, 1103, 1129, 1176, 1371, 1382, 1596, 1601, 1690, 1821, 2059, 2277, 2284, 2156, 1366, 2245]. **Modulated** [1982, 1291]. **modulus** [805]. **molecular** [1541, 2142]. **mollification** [14]. **Mollifications** [1219]. **Moment** [377, 1835, 1577, 1578, 1663]. **Moment-free** [1835]. **momentum** [368, 534]. **Monge** [165, 1817]. **Mono** [551]. **Mono-implicit** [551]. **monodromy** [858]. **Monolithic** [529]. **Monotone** [1678, 186, 385, 674, 1172, 1181, 1568, 1619, 1652, 1744, 2107, 2168]. **monotonic** [719, 775, 776, 1161, 2255]. **monotonicity** [780]. **Monotonous** [50]. **monotony** [897]. **monotony-preserving** [897]. **Monte** [214, 693, 1098, 1099, 1117, 1370, 1452, 1516, 1543, 1664, 1882]. **Morley** [1036, 2257]. **Morse** [609]. **mortar** [170, 169, 278, 308, 396, 1252, 1317, 1327]. **mortaring** [1253]. **Morton** [1496]. **motion** [346, 530, 1822, 1861]. **motions** [1295]. **motivated** [1064, 1176]. **moving** [861, 909, 961, 1299, 1398, 1399, 1655, 1750, 1759, 2208, 2222, 2175]. **moving-boundary** [909]. **MPFA** [528]. **MR** [591, 668, 829, 895, 1670, 2074]. **Multi** [630, 1611, 41, 183, 229, 230, 231, 356, 1244, 1299, 1471, 1609, 2030, 2246]. **multi-block** [1244]. **multi-component** [229, 230, 231, 356]. **multi-configuration** [1471]. **multi-dimensional** [41, 1609, 2030]. **multi-grid** [1299]. **multi-level** [2246]. **Multi-product** [630]. **Multi-symplectic** [1611, 183]. **multicomponent** [172, 1153]. **Multidimensional** [1550, 452, 845, 961, 1040, 1914, 1962, 1993]. **multidomain** [1031, 1717]. **multifacility** [744]. **Multigrid** [655, 2068, 179, 915, 966, 1131, 1134, 1154, 1288, 1292, 1346, 1631,

1632, 1880, 2169, 2243, 2278, 2298]. **multigrid-type** [1131]. **multilag** [197, 1371]. **Multilevel** [167, 177, 445, 965, 1014, 1098, 1099, 214, 326, 779, 1370, 1849, 2252]. **multiparameter** [450]. **multiphase** [1096]. **multiphysics** [981]. **Multiple** [1543, 4, 48, 209, 279, 654, 728, 1093, 1312, 1576, 1725, 1753, 1869, 2060, 2094, 2254]. **Multiplicative** [1919, 151, 800, 923, 983, 1498, 1612, 1629]. **multiplier** [96, 489]. **multipliers** [119, 362, 1317, 1542]. **multiply** [1473]. **multiply-connected** [1473]. **multipole** [1823]. **multiprocessor** [570]. **multiquadric** [267, 970]. **multiquadrics** [471]. **Multiresolution** [1266]. **Multiscale** [624, 4, 137, 221, 453, 645, 891, 1077, 1308, 1497, 1561, 1982, 2107, 2234, 2247]. **MultiShape** [1955]. **multisplitting** [186]. **multistate** [1570]. **Multistep** [523, 1279, 1353, 1362, 40, 210, 402, 524, 685, 771, 1375, 1554, 1634, 1636, 1829, 2011, 2112, 2150, 2152]. **multivalue** [495]. **multivalued** [1744]. **Multivariate** [1745, 689, 793, 1078, 1170, 1367, 2227]. **Mysovskii** [146].

Naghdi [311]. **Nagumo** [78]. **narrow** [606, 759]. **Natural** [328, 199, 1945]. **Navier** [786, 11, 30, 29, 123, 136, 168, 181, 265, 310, 306, 309, 318, 329, 428, 512, 534, 816, 960, 974, 976, 1039, 1054, 1055, 1056, 1111, 1188, 1227, 1247, 1281, 1301, 1420, 1514, 1563, 1571, 1643, 1674, 1804, 1875, 1927, 1930, 757, 2007, 2058, 722, 274, 750]. **Near** [296, 1692, 1693, 1694, 1854, 2012]. **Near-best** [1693, 1694, 1854]. **Near-minimal** [296]. **Near-minimax** [1692]. **nearest** [384, 699, 1274, 1923]. **nearly** [966, 980, 1522, 1913, 1914, 2099]. **nearness** [52]. **Necessary** [260]. **necessity** [323]. **negative** [371, 401, 1026]. **nematic** [202]. **Nemytskii** [2174]. **Nemytskii-type** [2174]. **nested** [1695]. **nets** [1116]. **network** [561, 928, 1128, 1171, 1431]. **networks** [882, 883, 1431, 1594, 1760, 1761, 757, 2281]. **Neumann** [132, 131, 178, 182, 204, 238, 242, 279, 320, 390, 564, 948, 992, 1687, 1756, 2132, 2195, 2224]. **neural** [561, 928, 1128, 1171, 1431, 1594, 1760, 1761, 757, 2281]. **neural-network** [561]. **neutral** [50, 472]. **neutron** [1664]. **newest** [1062]. **Newton** [20, 24, 43, 74, 146, 151, 185, 282, 354, 367, 384, 385, 413, 605, 713, 767, 920, 940, 977, 989, 990, 1153, 1154, 1156, 1198, 1201, 1428, 1481, 1487, 1530, 1560, 1556, 1596, 1780, 1838, 2019, 2201, 2190, 2216, 2231, 2238, 2268, 2288, 2289, 2159]. **Newton-CG** [2268]. **Newton-like** [146]. **Newton-Mysovskii-type** [146]. **Newton-type** [1428]. **Newtonian** [316, 317, 552, 674, 2292]. **Newtonlike** [2273]. **NEWUOA** [1903]. **Nicolson** [1140, 1402, 1648, 1945, 2256]. **Nirenberg** [506]. **Nitsche** [363, 488, 549, 633, 1252, 1253]. **NLS** [1395]. **no** [591, 668, 809, 829, 852, 857, 895, 1670, 2074]. **no-fill** [852, 857]. **Nodal** [91, 257]. **nodally** [222]. **nodes** [36, 480, 922, 1753, 2072, 2071, 2135]. **noise** [126, 366, 923, 983, 1242, 1432, 1475, 1476, 1498, 1612, 1619, 1629, 1666, 1776, 1915, 2198]. **noisy** [173, 918]. **Non** [397, 1409, 1594, 1848, 15, 129, 163, 264, 371, 498, 552, 557, 813, 833, 893, 1053, 1204, 1242, 1331, 1390, 1408, 1415, 1530, 1595, 1596, 1637, 1642, 1651, 1681, 1687, 1723, 1744, 1802, 1811, 2054, 2184, 2223, 2300, 750]. **Non-asymptotic** [1594]. **Non-autonomous** [1409]. **non-conforming** [129, 893, 1595, 1811]. **non-convex** [1594]. **non-Fickian** [264]. **non-Gaussian** [1242]. **non-globally** [1390]. **non-interior** [1331]. **non-linear** [163, 498, 833, 1053, 1530, 1637, 1681, 2054]. **non-Lipschitz** [15, 2223]. **non-local** [1204].

non-matching [557]. **non-monotone** [1744]. **non-negative** [371]. **non-Newtonian** [552]. **non-overlapping** [1642]. **non-periodic** [195]. **non-self-adjoint** [1687, 2184]. **non-separable** [1802]. **Non-smooth** [1848, 1415, 2300]. **non-standard** [1651]. **non-stationary** [813]. **non-symmetric** [1408, 1596, 1723]. **Non-variational** [397]. **Nonasymptotic** [388]. **Nonautonomous** [402, 351, 350, 630, 825, 1325, 1469]. **noncoercive** [564]. **noncompact** [573, 1696, 2137]. **Nonconforming** [537, 542, 1839, 33, 128, 249, 522, 556, 616, 734, 768, 937, 1283, 1314, 1412, 1566, 1749, 1948, 2089, 2183, 2257]. **nonconservative** [1985]. **nonconstant** [1347]. **noncontractive** [1892]. **nonconvex** [88, 399, 400, 546, 713, 1150, 1156, 1450, 1639, 2126, 2218]. **nondefectivity** [2162]. **nondiscrete** [1592]. **nondivergence** [1519]. **nondivergence-form** [1519]. **nonequilibrium** [1541]. **nonglobally** [2193]. **nonhomogeneous** [16, 949]. **Nonlinear** [1929, 752, 6, 25, 32, 42, 40, 69, 85, 91, 133, 159, 183, 182, 216, 280, 307, 319, 324, 330, 334, 370, 385, 442, 447, 518, 526, 595, 621, 639, 676, 680, 683, 709, 712, 735, 751, 785, 813, 867, 869, 872, 935, 945, 957, 956, 959, 973, 977, 994, 1025, 1043, 1044, 1047, 1059, 1068, 1072, 1074, 1075, 1157, 1165, 1174, 1178, 1201, 1209, 1234, 1257, 1258, 1290, 1291, 1293, 1351, 1354, 1374, 1380, 1382, 1424, 1423, 1437, 1443, 1448, 1453, 1484, 1568, 1572, 1586, 1593, 1625, 1719, 1721, 1722, 1731, 1742, 1755, 1756, 1787, 1791]. **nonlinear** [1814, 1827, 1857, 1898, 1906, 1926, 1934, 1985, 2005, 2055, 2064, 2101, 2107, 2133, 2134, 2168, 2180, 2203, 2192, 2231, 2257, 2270, 2288, 2282, 2302]. **nonlinearities** [1390, 1932]. **nonlinearity** [542]. **Nonlocal** [17, 353, 26, 78, 583, 610, 845, 943, 1205, 1383, 1575, 2189]. **nonmatching** [141, 409]. **nonmonotone** [623, 1341]. **nonnegative** [571, 705, 1224, 1925]. **nonnormality** [335]. **nonoscillatory** [429]. **Nonoverlapping** [407, 2274, 2263]. **nonperiodic** [1864]. **nonpolygonal** [37]. **nonpositive** [710]. **nonresidual** [550]. **nonself** [380]. **nonself-adjoint** [380]. **Nonselfadjoint** [649]. **Nonsimple** [2070]. **nonsingular** [1143]. **nonsingularity** [2162]. **Nonsmooth** [1153, 1169, 1434, 1661, 156, 346, 548, 607, 714, 715, 740, 783, 1025, 1154, 1155, 1255, 1318, 1401, 1464, 1465, 1768, 2232, 2245, 2275, 2116, 1433]. **nonstandard** [1179]. **nonstationary** [362, 521, 1959]. **nonstiff** [1829]. **nonsymmetric** [461, 462, 1193, 1570]. **nonuniform** [36, 652, 1425, 1427]. **nonuniformly** [385]. **nonunisolvent** [547]. **norm** [42, 117, 131, 355, 617, 782, 796, 825, 944, 998, 1173, 1234, 1479, 1598, 1606, 1715, 1762, 1975, 2046]. **normal** [760, 1320, 1452]. **normalized** [75, 953, 1574]. **norms** [28, 148, 693, 735, 925, 1088, 1155, 1968, 2229]. **note** [325, 416, 477, 657, 663, 852, 857, 1083, 1335, 1565, 1960, 1984, 2111]. **novel** [112, 1739, 2196]. **nuclear** [632]. **number** [178, 286, 287, 390, 425, 961, 2236]. **numbers** [627, 1775, 2235]. **Numer** [591, 668, 829, 895, 1670, 2074]. **numerator** [774]. **Numerical** [3, 38, 138, 157, 194, 202, 201, 218, 244, 250, 245, 248, 285, 304, 303, 338, 356, 366, 375, 376, 373, 428, 502, 535, 553, 607, 621, 605, 660, 662, 668, 669, 672, 698, 717, 718, 848, 880, 913, 906, 912, 929, 992, 1013, 1016, 1022, 1033, 1042, 1050, 1074, 1090, 1119, 1224, 1226, 1276, 1298, 1377, 1407, 1419, 1460, 1461, 1485, 1487, 1489, 1496, 1532, 1567, 1576, 1626, 1755, 1822, 1893, 1942, 2072, 2071, 2097, 2167, 2168, 2210, 2249, 17, 91, 158, 160, 163, 162, 164, 165, 181, 183, 257, 284, 292, 329, 337, 343, 360, 378]. **numerical** [382, 413, 412, 450, 454, 463, 516, 524, 548, 551, 569, 575, 577, 609, 613, 634, 648, 665,

699, 706, 765, 833, 842, 839, 863, 864, 867, 902, 974, 975, 991, 1007, 1011, 1034, 1039, 1068, 1089, 1099, 1111, 1122, 1160, 1166, 1186, 1185, 1246, 1275, 1282, 1301, 1322, 1333, 1342, 1347, 1354, 1363, 1364, 1390, 1409, 1424, 1433, 1434, 1476, 1512, 1536, 1577, 1578, 1582, 1575, 1603, 1615, 1622, 1625, 1628, 1652, 1658, 1669, 1670, 1698, 1712, 1715, 1716, 1733, 1766, 1767, 1785, 1795, 1793, 1810, 1835, 1863, 1910, 1936, 1939, 1958, 1978, 1991, 1995, 1996, 2004]. **numerical** [2005, 2021, 2040, 2039, 2041, 2042, 2048, 2063, 2108, 2139, 2141, 2169, 2172, 2189, 2234, 788, 2159, 2156]. **numerical-analysis-focused** [516]. **Numerically** [1118, 755, 877, 1219, 1218, 1277]. **numerics** [886, 1174]. **Nyström** [747, 1696, 391, 816, 827, 828, 829, 833, 1147, 1463, 1697, 1912, 2027]. **Nyström-product** [1147].

O.D.E. [572]. **obeying** [194]. **observability** [929]. **observation** [52]. **obstacle** [258, 364, 537, 762, 2182, 748]. **obstacles** [1093, 1910]. **obtain** [2149]. **obtaining** [1841]. **ODE** [708, 2024, 2172]. **ODEs** [418, 920, 1829, 1926, 2022, 2023, 2280]. **Oldroyd** [346, 1861]. **One** [2011, 2082, 48, 120, 182, 223, 324, 346, 413, 443, 563, 617, 666, 735, 808, 902, 929, 1018, 1035, 1052, 1060, 1175, 1183, 1210, 1398, 1533, 1536, 1570, 1654, 1729, 1732, 1808, 1845, 1858, 1909, 2017, 2087, 2099, 1803]. **one-dimension** [2087]. **one-dimensional** [120, 182, 413, 443, 563, 666, 929, 1018, 1052, 1398, 1536, 1570, 1654, 1808, 1909, 2017]. **one-leg** [1183]. **One-shot** [2082]. **One-step** [2011, 902, 1175, 1210, 1533]. **only** [2275]. **onto** [20, 55]. **open** [2261]. **operations** [1832]. **Operator** [348, 1771, 170, 169, 360, 369, 490, 573, 630, 646, 726, 839, 971, 1036, 1061, 1178, 1234, 1231, 1243, 1430, 1590, 1696, 1764, 1770, 1780, 2069]. **operators** [9, 89, 170, 169, 213, 327, 335, 375, 376, 390, 397, 459, 519, 637, 643, 703, 848, 847, 932, 936, 955, 1027, 1028, 1044, 1136, 1181, 1317, 1424, 1486, 1552, 1703, 1704, 1748, 1775, 1892, 1934, 1941, 2077, 2083, 2138, 2137]. **optical** [1219, 1218]. **Optimal** [22, 54, 75, 227, 226, 225, 317, 383, 409, 420, 440, 499, 741, 789, 802, 820, 863, 866, 919, 1047, 1062, 1085, 1117, 1244, 1295, 1343, 1399, 1498, 1557, 1601, 1953, 1965, 1968, 2063, 2094, 2134, 2185, 2242, 2271, 753, 2299, 116, 143, 265, 435, 446, 461, 462, 548, 595, 605, 628, 728, 813, 821, 927, 924, 1044, 1173, 1200, 1214, 1403, 1493, 1494, 1495, 1573, 1724, 1849, 1850, 1874, 1933, 2215, 2266]. **Optimal-order** [2299, 2266]. **Optimal-rate** [1965]. **Optimality** [277, 83, 84, 273, 326, 1048, 1255]. **Optimally** [984]. **optimization** [2, 57, 82, 83, 84, 117, 171, 276, 367, 399, 400, 546, 622, 675, 712, 713, 714, 730, 783, 887, 898, 918, 1150, 1157, 1156, 1201, 1318, 1389, 1465, 1558, 1616, 1639, 1768, 1802, 1838, 1904, 1925, 1955, 1993, 2060, 2064, 2082, 2145, 2190, 2218, 2232, 2253, 2275, 2277]. **Optimized** [649, 803, 804]. **option** [1893, 2196]. **options** [1321]. **orbits** [337, 338, 524, 1016, 1772, 2012]. **Order** [479, 495, 670, 772, 979, 1361, 23, 29, 36, 53, 59, 63, 64, 67, 83, 84, 95, 122, 136, 150, 224, 265, 290, 291, 300, 322, 339, 342, 346, 351, 350, 361, 365, 381, 383, 391, 485, 486, 499, 509, 523, 530, 526, 532, 538, 543, 549, 580, 588, 595, 617, 602, 600, 694, 702, 734, 754, 768, 777, 790, 792, 791, 794, 796, 811, 818, 822, 828, 829, 834, 840, 843, 844, 895, 896, 921, 925, 927, 983, 997, 1002, 1018, 1035, 1054, 1055, 1058, 1060, 1081, 1109, 1113, 1117, 1116, 1123, 1135, 1160, 1180, 1210]. **order** [1211, 1221, 1243, 1254, 1256, 1259, 1289, 1306, 1307, 1314, 1315, 1328, 1344, 1346, 1372, 1375, 1417, 1439, 1474, 1482, 1483, 1497, 1505, 1525, 1528, 1540, 1544, 1552, 1566, 1580, 1575, 1581, 1598, 1595, 1604, 1606, 1614, 1627, 1656,

1668, 1672, 1678, 1715, 1732, 1735, 1741, 1763, 1777, 1790, 1795, 1793, 1816, 1878, 1895, 1976, 1977, 2015, 2021, 2042, 2053, 2079, 2093, 2092, 2170, 2203, 2189, 2192, 2238, 2239, 2234, 2242, 2251, 2255, 2266, 2267, 2270, 2276, 2279, 2285, 2295, 2294, 2299, 721, 2160, 2153, 2174, 552]. **order-one** [1035]. **orders** [451, 1537, 2027]. **ordinary** [122, 226, 495, 902, 1007, 1100, 1175, 1221, 1269, 1354, 1391, 1585, 1603, 1941, 2141, 2226]. **orientation** [938]. **oriented** [696]. **origin** [1320]. **original** [821]. **Orthogonal** [1043, 1272, 1836, 342, 515, 611, 931, 1189, 1339, 1862, 1925, 1980, 2035, 2210, 2216]. **orthonormal** [764, 763]. **orthonormalization** [1473]. **orthonormalizing** [1130]. **oscillating** [1363, 1364]. **Oscillation** [1160, 21, 1337, 1338, 1366, 1367]. **oscillators** [1364]. **oscillatory** [154, 453, 459, 466, 580, 665, 810, 815, 1298, 1835, 1986, 2036, 2187, 2248, 2249]. **Oseen** [733, 1012, 1706, 2140]. **other** [2099]. **outflow** [1514]. **output** [1740, 1964]. **overall** [461, 462]. **Overcoming** [1413, 1254]. **overdamped** [1478]. **overdetermined** [688, 1240, 1906, 2212]. **Overflow** [978]. **Overlapping** [380, 862, 1589, 1642, 2240]. **overrelaxation** [1235, 1690].

P [233, 1578, 234]. **p.d.e.s** [1101, 325]. **packet** [112, 298, 952, 1739]. **Padé** [847]. **Padé-parametric** [847]. **pair** [224]. **pairs** [1504, 1522, 2101]. **panel** [626, 1489]. **pantograph** [562, 1183, 1325]. **paper** [375, 1258]. **parabolic** [5, 14, 45, 42, 40, 66, 67, 74, 87, 145, 201, 239, 319, 324, 325, 351, 427, 426, 486, 561, 582, 652, 787, 876, 925, 946, 954, 955, 957, 956, 991, 1046, 1064, 1084, 1097, 1105, 1124, 1200, 1232, 1256, 1419, 1424, 1423, 1440, 1441, 1448, 1444, 1485, 1482, 1483, 1520, 1554, 1557, 1581, 1606, 1637, 1638, 1655, 1719, 1728, 1755, 1756, 1757, 1814, 1826, 1859, 1860, 1862, 1940, 1964, 1974, 2021, 2029, 2045, 2078, 2100, 2171, 2220, 2262, 2265, 2266, 2267, 2305, 2160, 2155]. **paradigm** [1111]. **paradox** [260]. **Parallel** [210, 1009, 1290, 1075, 1243, 1356, 2029, 2202, 2263]. **Parameter** [1023, 1585, 1900, 39, 343, 1041, 1405, 1575, 1890]. **parameter-dependent** [39]. **Parameter-free** [1023, 1900]. **parameterized** [928, 1190, 1189]. **parameters** [776, 784, 785]. **Parametric** [176, 1065, 1238, 199, 847, 1557, 2296]. **parametrization** [1772]. **parametrized** [559]. **parareal** [2239]. **part** [773, 799, 914, 1556, 2096, 2238, 2289, 756, 170, 169, 292, 445, 519, 616, 871, 944, 1914, 2236]. **Partial** [1343, 1, 201, 523, 725, 911, 905, 921, 927, 928, 1010, 1022, 1165, 1174, 1304, 1455, 1458, 1468, 1498, 1549, 1619, 1710, 1859, 1860, 1862, 1949, 2032, 2085]. **partially** [307, 1194]. **particle** [214, 615, 2269]. **particular** [160]. **partition** [889]. **Partitioned** [1937]. **Partitioning** [2221, 1250, 1269]. **partitions** [192, 417, 1618, 2066]. **Pasteur** [1590]. **patch** [199]. **patches** [964]. **path** [20, 1902]. **path-following** [20]. **Pathwise** [1467, 1810]. **PDE** [57, 117, 171, 237, 628, 957, 1087, 1201, 1655, 1666, 1955, 2082, 1350]. **PDE-constrained** [57, 117, 171, 1201, 1955, 2082]. **PDEs** [5, 54, 176, 366, 440, 448, 461, 462, 511, 582, 624, 667, 1046, 1171, 1306, 1307, 1370, 1428, 1452, 1484, 1628, 1687, 1746, 1760, 1761, 1893, 2220, 2254]. **Peclet** [961]. **penalization** [1643]. **penalized** [1194]. **penalty** [220, 363, 434, 487, 489, 601, 622, 712, 802, 817, 870, 893, 982, 1025, 1056, 1085, 1083, 1139, 1151, 1173, 1177, 1180, 1225, 1330, 1464, 1545, 1616, 1925]. **penalty-free** [363, 622]. **pencils** [95, 360]. **Penrose** [1466]. **Penrose-Fife** [1466]. **perfect** [1555, 1701, 1798, 1799]. **perfectly** [392]. **Performance** [1193, 2260]. **period**

[920, 2005]. **Periodic** [851, 1168, 195, 524, 778, 1165, 1375, 1772, 1840, 2012, 2082, 2086, 2203, 2197, 2152, 2153]. **periodic/non** [195]. **periodic/non-periodic** [195]. **permutations** [1871]. **perovskite** [3]. **Persistence** [1175]. **Perturbation** [979, 576, 1256, 1994, 2080, 2094, 2213, 2264]. **perturbations** [2163]. **perturbed** [74, 93, 167, 487, 563, 592, 864, 967, 1479, 1480, 1501, 1509, 1523, 1605, 1608, 1640, 1658, 1725, 1743, 1749, 1748, 2093, 2092, 2098, 2171, 2176]. **Petrov** [23, 227, 341, 446, 787, 1749, 1784, 2004, 2192]. **PH** [963]. **phase** [25, 45, 229, 230, 231, 246, 237, 356, 429, 433, 528, 620, 735, 740, 832, 861, 1018, 1057, 1067, 1299, 1394, 1416, 1454, 1466, 1586, 1597, 1598, 1679, 1779, 1857, 1858, 1920, 1932]. **phase-field** [1454, 1466]. **phase-function** [1920]. **phenomenon** [1891]. **physics** [928, 1760, 1761, 1889, 757, 2281]. **physics-informed** [928, 1760, 1761, 757, 2281]. **Picard** [582, 920, 1340]. **Piecewise** [503, 1161, 1852, 70, 71, 610, 662, 780, 874, 1551, 1607, 1748, 1902, 2102, 1088]. **Piecewise-smooth** [1852, 71, 1607]. **piecewise-uniform** [1748]. **piezoelectric** [115]. **PIN** [38]. **pipe** [882, 883]. **Pitaevskii** [811, 872, 1037, 1073]. **Pitaevskii-type** [872]. **Pivoting** [1873]. **Plain** [1045]. **planar** [162, 336, 577, 1016, 1660]. **Planck** [1313, 1322, 1793]. **plane** [75, 244, 871, 1001, 1002, 1347, 1351, 1437, 2019, 2186]. **plane-wave** [871, 1347]. **planewave** [519]. **plans** [1573]. **plasma** [243]. **plate** [258, 1131, 1910, 2063, 2177, 2183]. **plates** [373, 374]. **plating** [1107]. **Plemmons** [1676]. **plotting** [418]. **plus** [267, 906]. **Poincaré** [1317, 1870, 2165]. **point** [7, 60, 189, 187, 211, 263, 338, 340, 344, 361, 411, 588, 589, 654, 894, 961, 978, 1025, 1059, 1065, 1068, 1072, 1118, 1172, 1262, 1309, 1560, 1743, 1789, 1869, 1946, 2053, 2060, 2088, 2093, 2092, 2148, 2176, 2194, 2241, 2264, 755]. **points** [19, 164, 440, 618, 920, 996, 1164, 1378, 1377, 1379, 1495, 1510, 1511, 1770, 1911, 1995, 2070, 2073, 2074, 2115, 2145, 2266]. **Pointwise** [1196, 1403, 1480, 1499, 748, 22, 54, 435, 511, 548, 724, 809, 1346, 1500, 1817, 2195]. **Pointwise-in-time** [1403]. **pointwise-integral** [548]. **Poisson** [140, 160, 219, 424, 543, 819, 947, 992, 1005, 1234, 1493, 1518, 1595, 1711, 1763, 1879, 2297]. **Poisson-Neumann** [992]. **Poisson-type** [1518]. **Polak** [2284]. **polar** [1763]. **pole** [1518]. **poles** [763, 2291]. **pollution** [739, 1552, 1687]. **Pólya** [269]. **Polyak** [2284]. **polygon** [833, 977, 2059]. **polygonal** [625, 791, 958, 1563, 2293]. **polygons** [667, 917, 1019, 2225]. **polyharmonic** [266, 268]. **polyhedral** [132, 369, 1233, 1927]. **polymer** [264]. **polymers** [250]. **Polynomial** [455, 1340, 1535, 73, 267, 387, 503, 525, 610, 675, 766, 858, 901, 1088, 1358, 1382, 1427, 1487, 1671, 1692, 1806, 1828, 1833, 1854, 1884, 2003, 2119, 2222, 2229, 758]. **Polynomials** [1272, 73, 287, 463, 464, 515, 998, 1149, 1309, 1339, 1696, 1697, 1856, 1863, 1876, 1994, 2119, 2147, 2158]. **Polytopal** [1121, 1618, 1730]. **polytopes** [417]. **population** [80, 945]. **poroelasticity** [533, 981, 1457, 2293]. **porous** [25, 307, 432, 431, 528, 529, 769, 1070, 1072, 1416, 1545, 1932]. **Port** [1506]. **Port-Hamiltonian** [1506]. **posed** [385, 672, 1976]. **posedness** [26, 1796]. **positioning** [1676]. **Positive** [474, 1177, 269, 473, 1026, 1112, 1661, 1695, 1869, 1913, 1914, 1946, 2025, 2161, 2214]. **positive-definite** [2025]. **positive-definiteness** [269]. **positive-semidefinite** [1946]. **positive-type** [1661]. **Positivity** [1313, 1095]. **Positivity-preserving** [1313].

Post [32, 294, 519, 871, 1011]. **Post-processing** [32, 294, 519, 871, 1011]. **posteriori** [92, 116, 130, 137, 141, 212, 251, 278, 292, 311, 307, 314, 316, 355, 357, 415, 434, 511, 541, 554, 604, 633, 695, 770, 814, 836, 890, 893, 925, 1059, 1081, 1082, 1079, 1096, 1304, 1306, 1442, 1440, 1441, 1457, 1466, 1479, 1509, 1651, 1738, 1778, 1812, 1834, 1840, 1864, 1865, 1940, 2100, 2122, 2166, 2178, 2184, 2301, 752, 121, 468, 482, 782, 1084, 1584, 1606, 2292, 748, 127, 491, 872, 1666, 1944, 1095, 1508]. **postprocessing** [132]. **Potential** [2109, 169, 1303, 1351, 1437, 1614, 1819]. **potentials** [183]. **Powell** [742, 798, 2068]. **power** [194, 552, 1095, 1800]. **power-law** [1095]. **power-like** [552]. **powers** [9, 375, 376, 848, 847]. **practical** [237]. **Pre** [2236]. **Pre-asymptotic** [2236]. **Precise** [634]. **precision** [72, 699, 1743, 1952]. **Preconditioned** [188, 2164, 184, 384, 836, 1197, 1882, 2043]. **preconditioner** [504, 608, 1017, 1659, 1849, 1946]. **Preconditioners** [1880, 525, 571, 572, 631, 891, 1024, 1104, 1123, 1869, 2057, 2060, 2132, 2194, 749]. **Preconditioning** [1317, 1815, 148, 167, 297, 321, 385, 412, 445, 1764, 1900, 1901, 2000]. **preconvex** [2289]. **Predictor** [2151, 2153, 1138, 2155, 2154]. **Predictor-corrector** [2151, 2153, 2155, 2154]. **prescribed** [480, 621, 760]. **presence** [228]. **Preservation** [284, 1015]. **Preserving** [581, 1020, 152, 222, 330, 418, 534, 737, 774, 882, 883, 897, 963, 962, 1019, 1057, 1094, 1095, 1178, 1313, 1427, 1426, 1612, 1609, 1765, 1867, 1918, 2016, 2180, 2272, 2280]. **Pressure** [1056, 274, 128, 433, 497, 504, 1019, 1054, 1051, 1260, 1285, 1494, 1601, 1682, 1777, 1930, 722]. **pressure-correction** [1260]. **pressure-dependent** [1285]. **pressure-robust** [128, 1019, 1494, 1601, 1930]. **pressure-stress** [1051]. **pressures** [35, 432]. **prestrained** [373]. **pricing** [1330, 1893, 2196]. **primal** [69, 353, 2131]. **primal-dual** [353]. **primitive** [150]. **primitive-variable** [150]. **principal** [1895, 2200]. **principle** [956, 989, 1405]. **principles** [957, 1443]. **priori** [119, 251, 430, 541, 554, 735, 770, 893, 985, 1408, 1454, 1491, 1724, 1778, 1858, 2075, 2176, 2203, 482, 659, 1037, 2184, 2292]. **Prize** [97]. **probabilistic** [1158, 1755, 1756]. **problem** [10, 16, 23, 32, 33, 58, 86, 93, 116, 115, 129, 135, 134, 139, 138, 169, 180, 186, 198, 218, 221, 243, 255, 262, 279, 301, 305, 310, 308, 312, 357, 359, 358, 370, 403, 404, 413, 434, 430, 435, 436, 439, 438, 459, 485, 501, 503, 512, 543, 537, 554, 563, 585, 600, 601, 625, 644, 733, 735, 744, 791, 802, 813, 817, 819, 832, 838, 840, 872, 907, 909, 903, 915, 919, 930, 942, 947, 959, 967, 969, 977, 985, 991, 1012, 1019, 1033, 1037, 1051, 1069, 1080, 1090, 1105, 1107, 1110, 1122, 1196, 1197]. **problem** [1229, 1247, 1274, 1287, 1383, 1388, 1403, 1412, 1416, 1419, 1449, 1461, 1479, 1480, 1509, 1536, 1563, 1555, 1586, 1602, 1604, 1608, 1640, 1657, 1654, 1665, 1688, 1700, 1706, 1718, 1730, 1749, 1755, 1756, 1769, 1804, 1805, 1814, 1849, 1851, 1857, 1858, 1874, 1881, 1890, 1908, 1912, 1915, 1923, 1976, 1990, 2082, 2084, 2088, 2094, 2097, 2095, 2117, 2128, 2142, 2148, 2169, 2171, 2178, 2195, 2181, 2182, 2183, 2184, 2231, 2246, 2252, 2294, 748, 2175]. **problems** [2, 4, 7, 15, 59, 60, 62, 63, 64, 66, 67, 91, 92, 117, 119, 132, 131, 141, 143, 144, 145, 173, 189, 188, 187, 195, 205, 210, 247, 253, 290, 291, 293, 303, 320, 322, 336, 339, 340, 342, 341, 343, 348, 361, 380, 381, 385, 390, 391, 401, 406, 410, 450, 487, 489, 488, 486, 498, 518, 521, 522, 520, 529, 539, 542, 548, 559, 561, 564, 570, 586, 588, 589, 592, 621, 605, 619, 602,

603, 610, 628, 633, 639, 641, 650, 652, 651, 654, 672, 674, 679, 689, 695, 696, 703, 751, 762]. **problems** [765, 768, 782, 785, 816, 818, 822, 821, 861, 864, 878, 884, 891, 894, 925, 937, 946, 949, 948, 956, 973, 992, 1017, 1018, 1025, 1029, 1030, 1048, 1052, 1058, 1059, 1060, 1064, 1068, 1075, 1078, 1083, 1081, 1079, 1084, 1091, 1096, 1098, 1099, 1104, 1109, 1114, 1126, 1124, 1154, 1160, 1172, 1190, 1195, 1200, 1209, 1222, 1242, 1243, 1244, 1252, 1256, 1262, 1290, 1299, 1300, 1302, 1305, 1315, 1327, 1333, 1346, 1351, 1375, 1394, 1398, 1424, 1423, 1436, 1437, 1439, 1443, 1450, 1464, 1465, 1485, 1482, 1483, 1484, 1490, 1491, 1493, 1501, 1502, 1520, 1523, 1532]. **problems** [1540, 1559, 1593, 1605, 1617, 1616, 1641, 1656, 1658, 1677, 1679, 1683, 1716, 1723, 1721, 1722, 1726, 1729, 1732, 1742, 1748, 1760, 1765, 1766, 1767, 1789, 1824, 1839, 1844, 1843, 1899, 1900, 1912, 1916, 1917, 1920, 1925, 1946, 1948, 1957, 1964, 1965, 1986, 1988, 1996, 2011, 2021, 2026, 2034, 2045, 2053, 2060, 2075, 2093, 2092, 2097, 2098, 2100, 2101, 2125, 2140, 2145, 2164, 2167, 2168, 2170, 2173, 2176, 2205, 2190, 2194, 2192, 2225, 2230, 2263, 2264, 2265, 2266, 2267, 2298, 720, 275, 749, 752, 2159, 2152, 2153, 1127]. **procedure** [834, 1905, 2263]. **procedures** [2011]. **Procesi** [660]. **process** [53, 694, 897, 1454, 1909]. **processes** [80, 133, 441, 662, 1336, 1477, 1478, 1983, 2108, 788]. **processing** [32, 294, 519, 871, 1011, 2031]. **Product** [19, 639, 2133, 514, 592, 630, 932, 964, 1147, 1452, 1889, 1951, 2089, 2107, 2280]. **product-convolution** [932]. **products** [2036, 2064]. **profile** [1130, 1218]. **programming** [85, 1006, 1118, 1137, 1177, 1245, 1465, 1779, 2231]. **Programs** [1255]. **progress** [1868]. **Projected** [2012, 82, 347, 742, 2231]. **Projection** [30, 2049, 2218, 20, 55, 76, 136, 299, 574, 733, 734, 1062, 1543, 1706, 1734, 1785, 2083, 750]. **Projection-free** [2218]. **projections** [1114, 2185]. **projective** [1780]. **projector** [924]. **projectors** [1675]. **Prokhorov** [579]. **prolate** [262]. **proliferation** [1204]. **Prolongation** [1546]. **Prolongation-collocation** [1546]. **proof** [2038]. **proofs** [1186, 1185]. **propagation** [293, 586, 1077, 1243, 1668, 1766, 1767]. **proper** [1189]. **Properties** [628, 1806, 1999, 2303, 2304, 17, 28, 280, 463, 492, 495, 562, 611, 665, 708, 729, 746, 955, 1003, 1020, 1088, 1129, 1348, 1683, 1691, 1734, 1893, 2005, 2069, 2101, 2123, 2229, 2250, 2251, 2262, 2302, 721]. **property** [47, 171, 707]. **proportional** [284, 458]. **protein** [81]. **provable** [1112]. **proximal** [1244, 1768]. **Prüfer** [343]. **pseudo** [952, 1481]. **pseudo-inverses** [1481]. **pseudo-spectral** [952]. **pseudorank** [173]. **Pseudospectra** [2233, 483]. **Pseudospectral** [1672, 1004, 1031, 1329, 1626, 1650, 1886, 1721, 1722, 1733]. **pseudostress** [501, 554, 1718]. **pseudostress-based** [554]. **Pták's** [1592]. **punch** [235]. **Pure** [79, 294]. **Pyramid** [1704]. **pyramids** [1816]. **Pythagorean** [962, 964]. **Pythagorean-hodograph** [962, 964].

Q [2089]. **QP** [995]. **QR** [1120]. **quad** [601, 791]. **quad-curl** [601]. **quad-rot** [791]. **quadrant** [663]. **Quadratic** [174, 478, 2083, 2266, 398, 434, 690, 775, 776, 774, 986, 1118, 1137, 1161, 1177, 1192, 1276, 1331, 1456, 1465, 1779, 1836, 1915, 1971, 2056, 2145, 2265]. **quadratically** [1177]. **Quadrature** [515, 917, 1987, 142, 154, 191, 208, 298, 341, 480, 578, 799, 1207, 1363, 1364, 1472, 1531, 1623, 1699, 1715, 1752, 1805, 1814, 1837, 1872, 1907, 1933, 2029, 2072, 2096, 2127, 2135, 2138, 2157, 2228, 753, 2071]. **Quadratures** [1753, 808, 1635, 1754]. **quadrilateral**

[55, 606, 2265, 2266, 2267, 2287]. **Qualitative** [1129, 17, 955]. **qualocation** [832, 1859]. **quantification** [1148, 1393]. **quantiles** [1842]. **Quantitative** [1573]. **quantization** [1853]. **quantum** [147]. **quarkonial** [725]. **Quartic** [1239, 851]. **Quasi** [385, 951, 1452, 1494, 1724, 1758, 2289, 113, 249, 316, 327, 351, 350, 461, 462, 471, 531, 606, 674, 728, 927, 1014, 1048, 1098, 1099, 1117, 1183, 1259, 1306, 1348, 1757, 1840, 1907, 2066, 2178, 2292, 1481, 2231, 2288]. **quasi-** [113]. **quasi-continuum** [1840]. **quasi-definite** [1907]. **quasi-geometric** [1183]. **quasi-interpolation** [471, 1014, 2066]. **quasi-linear** [1306, 1757]. **quasi-Magnus** [351, 350]. **Quasi-Monte** [1452, 1098, 1099, 1117]. **Quasi-Newton** [385, 2289, 1481, 2231, 2288]. **quasi-Newtonian** [316, 674, 2292]. **Quasi-optimal** [1494, 1724, 461, 462, 728, 927]. **quasi-optimality** [1048]. **Quasi-reliable** [951]. **quasi-second-order** [1259]. **quasi-square** [531]. **quasi-static** [2178]. **Quasi-symplectic** [1758]. **quasi-Trefftz** [1348]. **quasi-uniform** [327]. **quasi-variational** [249]. **quasi-Wilson** [606]. **quasicontinuum** [809]. **quasiconvex** [1]. **quasilinear** [339, 520, 674, 1232, 1286, 1305, 1662, 1858, 2176]. **quasimatrix** [2136]. **quasinonlocal** [1579]. **Quasioptimal** [550]. **quasistatic** [1571]. **queueing** [973]. **quintic** [270, 963, 962, 1864].

R [484, 731]. **R-algorithm** [484]. **R-linear** [731]. **Rachford** [594]. **radar** [392]. **radial** [266, 477, 473, 624, 1003, 1004, 1032, 1372, 1526, 1537, 1645, 1888, 2006, 2041, 2244]. **radiation** [262, 293, 2014]. **radiative** [718, 1010, 1147]. **radii** [1187]. **radiosity** [162, 1233]. **radius** [1246, 1434, 1733, 1433]. **Radon** [13]. **Random** [886, 1495, 1871, 53, 177, 286, 1098, 1099, 1271, 1370, 1393, 1558, 1738, 2103, 2269]. **Randomized** [793, 1291, 1802, 2227, 1078, 2162]. **Range** [362, 1542, 1271, 1428, 1429, 1579, 1904, 2036]. **range-dependent** [1271]. **Range-relaxed** [362, 1542]. **ranges** [360]. **rank** [72, 176, 286, 425, 643, 814, 824, 1277, 1616, 1845, 2145, 2161, 2213, 2304]. **rank-deficient** [286]. **rank-one** [1845]. **rank-revealing** [824]. **rapid** [21, 1337, 1338, 1366, 1367, 1679, 2028]. **Rate** [1044, 1995, 68, 88, 179, 326, 596, 1176, 1205, 1285, 1295, 1476, 1513, 1610, 1810, 1965]. **rate-independent** [88]. **rates** [22, 265, 354, 399, 400, 423, 444, 481, 865, 1063, 1158, 1390, 1429, 1496, 1574, 1805, 1916, 1917, 1967, 2017, 2125, 2198, 2185, 2217, 2223]. **Rational** [480, 1141, 1332, 1408, 2037, 386, 475, 476, 668, 669, 764, 763, 775, 776, 774, 784, 808, 1090, 1159, 1161, 1200, 1357, 1381, 1459, 1593, 1720, 1872, 2157, 2211, 2291]. **rationals** [61]. **Raviart** [198, 818, 1493, 1601]. **Rayleigh** [2006]. **RBF** [476, 475]. **reaction** [23, 133, 209, 334, 452, 563, 652, 695, 1020, 1165, 1470, 1479, 1480, 1509, 1566, 1605, 1608, 1622, 1654, 1658, 1725, 1984, 2005, 2240, 275, 2092]. **reaction-diffusion** [23, 133, 209, 652, 1622, 1658, 1725, 1984, 2005, 2240]. **Reaction-diffusion-type** [2092]. **reaction-subdiffusion** [1566]. **real** [297, 574, 747, 1187, 1687, 1693, 1698, 1699, 2135, 2150]. **real-valued** [297]. **Realistic** [770, 2207]. **really** [1019]. **reconstruction** [696, 1084, 1308, 1428, 1550]. **reconstructions** [1019, 1940]. **Recovery** [1406, 226, 225, 695, 1047, 1520, 1519, 1551, 1777, 1953, 2063, 2237, 2290, 225]. **Rectangular** [835, 531, 1008, 1617, 2089, 2233, 2258]. **rectangularly** [1879]. **rectilinear** [744]. **Recurrence** [764, 1309, 2047]. **Recursive** [1663, 1157, 1734, 1853].

recursive-trust-region [1157]. **redistancing** [933]. **Reduced** [1096, 1964, 34, 465, 578, 1041, 2152]. **Reduced-basis** [1964]. **reducible** [2228]. **reduction** [63, 64, 1223, 1254, 1319, 1646, 1805]. **Redundancy** [2065]. **redundant** [682]. **Reeves** [47, 729, 898]. **Referees** [99, 101, 103, 106, 108, 110]. **reference** [992]. **Refinable** [469]. **refined** [36, 55, 958, 960, 1163, 1206]. **refinement** [1273, 1717]. **reflection** [1110]. **reformulation** [183]. **Regge** [635]. **regime** [785, 1061, 2090]. **Region** [979, 81, 190, 1138, 1157, 1158, 1169, 1904, 2126, 2275]. **regions** [193, 901, 1184, 1455, 1660, 1879, 2151]. **regression** [675, 691, 1842, 2216]. **regressions** [1803]. **regular** [90, 267, 436, 474, 507, 1141]. **Regularity** [800, 113, 180, 182, 212, 447, 526, 1098, 1395, 1484, 1554, 1562, 1628, 2242, 2299, 723]. **regularization** [281, 546, 906, 1155, 1460, 2234]. **regularizations** [1209]. **Regularized** [187, 253, 280, 354, 390, 713, 939, 1189]. **Regularizing** [1242]. **regularly** [375, 376]. **reiterated** [1894]. **related** [19, 583, 1454, 1458, 1757, 1959, 2081]. **relation** [416]. **relations** [1136]. **relationship** [80]. **relative** [867, 1096, 1552]. **relaxation** [186, 1827, 2240]. **relaxed** [362, 1542]. **reliability** [661, 1045, 1451]. **reliable** [951]. **ReLU** [1594]. **Remarks** [1935]. **remeshing** [1921]. **removal** [1218]. **removing** [2200]. **renormalization** [1671]. **reordering** [1168, 1271]. **Repeated** [806, 1242]. **Representation** [1108, 643, 785, 1228]. **representations** [177]. **reproducing** [1958]. **reproduction** [2222]. **REQP** [261]. **requirements** [1613]. **reservoir** [504, 558]. **Residual** [278, 357, 633, 1584, 2178, 623, 1008, 1302, 1431, 1818, 1865]. **Residual-based** [357, 633, 1584, 1865]. **Residual-type** [2178]. **residuals** [135]. **residue** [2154]. **resistivity** [1474]. **resolution** [165]. **resolved** [431]. **resolvent** [2149]. **restart** [986]. **restarted** [1345, 1720]. **restricted** [650, 1481, 2026]. **restrictions** [956]. **Restrictively** [184]. **result** [1026, 1049, 2238]. **results** [12, 223, 538, 543, 574, 1099, 1386, 1876, 1908, 1983, 2149]. **Retarded** [1991, 1489]. **retrieval** [740]. **revealing** [824]. **revelations** [2144]. **reverse** [638]. **reversible** [524]. **revisited** [644]. **Ribière** [2284]. **Riccati** [1193, 1409, 1408, 1570, 1596, 1916, 1917, 2040]. **Riccati-based** [1916, 1917]. **Riccati-type** [1409]. **Ricci** [1021]. **Richards** [673]. **Richardson** [1116]. **Riemann** [640, 1742, 1877, 2128, 2138]. **Riemann-problem-based** [2128]. **Riemannian** [24, 190, 248, 767, 783, 881, 990, 1169, 1239, 1249, 1341, 1560, 1768, 2161, 2218]. **right** [48, 2094, 2121]. **right-hand** [48, 2094]. **right-hand-side** [2121]. **rightmost** [1723]. **rigid** [235, 947, 1910]. **risk** [276]. **risk-averse** [276]. **Ritz** [1940, 2006]. **RK** [1962]. **RK4** [125]. **RLW** [1191]. **Robbins** [1881]. **Robin** [242, 1407, 1449]. **Robust** [370, 483, 488, 604, 768, 966, 1055, 1457, 1591, 1725, 1990, 2057, 2122, 788, 19, 128, 209, 563, 933, 1019, 1056, 1425, 1494, 1535, 1601, 1726, 1762, 1930, 1932, 1948, 2171, 2301, 722, 274]. **rod** [1263]. **role** [412]. **Ronald** [1167]. **root** [743, 1533, 758]. **root-finding** [1533, 758]. **roots** [422, 1667]. **Rosenbrock** [1435]. **Ross** [53, 694]. **rot** [791]. **rot-rot** [791]. **rotating** [947, 1251]. **rotation** [811, 812, 1633]. **Rothe** [1424]. **Rothe-Galerkin** [1424]. **rough** [451, 598, 2217]. **round** [699]. **round-to-nearest** [699]. **rounding** [699, 2273]. **RPC** [820]. **RPC-SAV** [820]. **rule** [1374, 1662]. **rules** [19, 298, 420, 815, 1556, 1647, 1684, 1699, 1752, 2096, 2127, 2179, 2228, 2158]. **Runge** [2074, 193, 207, 283, 479, 494, 508, 509, 513,

551, 681, 677, 678, 679, 680, 826, 830, 827, 828, 829, 834, 876, 1166, 1220, 1270, 1312, 1324, 1356, 1504, 1611, 1691, 1821, 1848, 1934, 1983, 1998, 2012, 2027, 2042, 2073, 2170, 2221, 2282, 1349, 2156, 2150, 2174].

Sabin [742, 798, 2068]. **saddle** [189, 187, 411, 1059, 1068, 1072, 1869, 1946, 2060, 2148, 2194, 2264, 755]. **saddle-point** [189, 187, 411, 1869, 2148]. **safeguarded** [1818]. **Sakaguchi** [8]. **sample** [618, 675, 951]. **sampled** [1639]. **samples** [22]. **Sampling** [1951, 22, 94, 153, 214, 276, 2108, 2253]. **Sandpiles** [249]. **satisfying** [1038]. **saturated** [307]. **saturation** [1361]. **SAV** [820, 1736, 2219]. **scalar** [405, 1214, 1305, 1737, 1738, 1898, 2010, 2030, 2279]. **scale** [181, 594, 920, 1137, 1568, 1574, 1608, 1721, 1722, 1817, 2040]. **scaleable** [1762]. **scaled** [408]. **scales** [4, 209, 1725]. **Scaling** [1526, 968, 1968, 2215]. **scattered** [742, 2244]. **scattering** [208, 335, 390, 577, 816, 878, 947, 1041, 1093, 1268, 1393, 1462, 1463, 1534, 1576, 1663, 1813]. **Scharfetter** [1997]. **scheme** [3, 27, 88, 91, 142, 175, 217, 223, 252, 254, 259, 299, 333, 370, 424, 528, 567, 565, 582, 592, 620, 613, 596, 632, 648, 652, 651, 661, 681, 700, 738, 800, 834, 841, 842, 843, 882, 883, 892, 922, 937, 939, 956, 1040, 1086, 1094, 1095, 1106, 1135, 1188, 1196, 1243, 1248, 1260, 1259, 1294, 1301, 1401, 1417, 1420, 1423, 1440, 1448, 1466, 1475, 1476, 1514, 1521, 1524, 1553, 1575, 1572, 1599, 1600, 1604, 1612, 1628, 1652, 1656, 1661, 1674, 1735, 1736, 1793, 1797, 1803, 1805, 1875, 1910, 1932, 1931, 1937, 1945, 1962, 1989, 1997]. **scheme** [2005, 2014, 2054, 2193, 2219, 2245, 2246, 2272]. **Schemes** [838, 13, 14, 25, 41, 65, 96, 133, 150, 196, 214, 294, 329, 332, 364, 369, 403, 404, 407, 465, 516, 534, 558, 564, 566, 568, 580, 597, 628, 660, 687, 810, 820, 823, 841, 859, 935, 938, 967, 988, 987, 991, 1018, 1076, 1140, 1214, 1220, 1223, 1256, 1295, 1308, 1313, 1328, 1342, 1384, 1418, 1447, 1467, 1474, 1583, 1627, 1677, 1719, 1741, 1763, 1774, 1776, 1929, 1943, 1960, 1985, 2010, 2025, 2030, 2098, 2120, 2128, 2129, 2180, 2189, 2199, 2217, 2250, 2251, 2270, 2279]. **Schmidt** [1103]. **Scholes** [559, 1425, 2196, 1350]. **Schrödinger** [6, 46, 112, 183, 182, 330, 350, 447, 519, 526, 599, 785, 867, 871, 1074, 1178, 1291, 1374, 1517, 1536, 1612, 1609, 1645, 1648, 1649, 1739, 1898, 1985, 2006, 2041, 2042, 2134]. **Schur** [1104, 1153, 2060]. **Schwarz** [649, 151, 178, 380, 407, 803, 804, 891, 1267, 1439, 1538, 1589, 2000, 2114, 2240, 2257, 2274]. **Schwarz-Neumann** [178]. **screens** [328, 1268, 1392]. **SDEs** [615, 923, 1086, 1521, 1790, 1805, 1944, 2199, 831]. **search** [47, 622, 623, 715, 1139, 1341, 2254]. **search-extension** [2254]. **Second** [1307, 67, 83, 84, 95, 150, 161, 164, 283, 339, 342, 486, 523, 530, 526, 600, 702, 790, 794, 796, 818, 921, 1055, 1058, 1109, 1132, 1135, 1138, 1146, 1221, 1259, 1306, 1323, 1344, 1346, 1375, 1410, 1417, 1439, 1552, 1575, 1581, 1606, 1614, 1656, 1698, 1795, 1793, 1872, 2052, 2053, 2192, 2238, 2239, 2242, 2255, 2290, 2116, 2156, 2153]. **second-derivative** [1138]. **second-kind** [1698, 2116, 2156]. **Second-order** [1307, 67, 83, 84, 95, 150, 339, 342, 486, 523, 530, 526, 600, 702, 790, 794, 796, 818, 921, 1055, 1058, 1109, 1135, 1221, 1306, 1344, 1375, 1417, 1439, 1552, 1575, 1581, 1606, 1614, 1656, 1795, 1793, 2053, 2192, 2238, 2239, 2242, 2255, 2153]. **second-order-accurate** [1346]. **section** [392]. **sectorial** [771, 1279]. **SEEs** [800]. **Segel** [333, 1095, 1313, 1973]. **segment** [199]. **Segrè** [2162]. **Seidel** [1288]. **selection** [2, 766, 1220, 1844, 2230]. **self** [142, 259, 397, 714, 861, 1552, 1687, 2083, 2184]. **self-adaptive** [142, 861]. **self-adjoint** [397, 1552, 2083]. **self-avoiding** [259]. **self-correcting** [714]. **Semi** [465, 6, 60, 317,

643, 648, 1227, 1248, 1297, 1398, 1553, 299]. **Semi-discrete** [465, 1398, 1553]. **semi-discretizations** [6]. **semi-implicit** [317, 648, 1227, 1248, 1297]. **semi-infinite** [643]. **semi-Lagrangian** [299]. **semi-linear** [60]. **semiaxis** [747, 1698, 1699]. **semibounded** [1934]. **semiclassical** [112, 785, 1517, 1739]. **semidefinite** [637, 1006, 1177, 1616, 1946, 2161]. **semidefinite-box-constrained** [1616]. **Semidiscrete** [1861, 221, 423, 1124, 1400, 2021]. **semidiscretization** [673, 1051]. **semidiscretized** [1360]. **semiexplicit** [65]. **semigroup** [53, 1486]. **Semilinear** [1850, 5, 45, 74, 542, 563, 582, 701, 832, 983, 1432, 1479, 1480, 1780, 1795, 1924, 2254, 2285]. **Semirobust** [1227]. **semiseparable** [1695]. **semismooth** [20]. **sensitivity** [1889]. **separable** [1154, 1245, 1244, 1802]. **separation** [229, 230, 231, 356]. **sequence** [1841]. **sequences** [499, 793, 1116]. **Sequential** [1993, 83, 84, 1255, 1779]. **series** [21, 94, 500, 900, 1108, 1213, 1693, 1694, 1800, 1801, 1879, 2055, 2139, 727]. **Set** [1278, 353, 873, 933, 939, 1103, 1468, 1550, 2161]. **set-valued** [873, 1468, 1550]. **sets** [347, 547, 675, 682, 1822, 2012]. **setting** [560]. **Several** [2101, 196, 516, 1627, 2127]. **severe** [978]. **shallow** [124, 125, 302, 1259, 1431]. **Sham** [871]. **Shanks** [442]. **Shanno** [1905]. **Shape** [418, 774, 963, 962, 1426, 1918, 152, 737, 881, 1125, 2272]. **Shape-preserving** [418, 963, 962, 1426, 152, 737]. **shaped** [1640]. **Sharp** [545, 686, 610, 1589]. **Shaw** [909]. **shear** [1285]. **shear-rate-** [1285]. **sheet** [255]. **shell** [311, 1653]. **Shepard** [777]. **shifted** [164]. **shifts** [1130, 1320, 1701]. **Shishkin** [1196, 1602, 1617, 1641, 1960]. **shock** [1110]. **shock-reflection** [1110]. **shooting** [1300, 1920]. **Shor** [484]. **Short** [1185]. **shortening** [761, 908]. **shot** [2082]. **shrinking** [760]. **side** [2121]. **sided** [316]. **sides** [48, 2094]. **Siewert** [77]. **signal** [784]. **significance** [978]. **significant** [2143]. **Signorini** [549, 1029, 1899, 2178, 2181]. **Signorni** [2075]. **Signorni-type** [2075]. **Sigurdsson** [1981]. **similarity** [1110, 1962]. **Simple** [1015, 34, 252, 254, 259, 861, 924, 1139, 2047]. **simplex** [20, 618, 715, 1240]. **simplicial** [260, 417, 821]. **simplified** [717, 1973]. **simulating** [258, 1190, 2296]. **Simulation** [255, 831, 196, 504, 615, 642]. **simulations** [285, 1910]. **Simultaneous** [2099, 1667, 1992, 2105]. **Sinc** [340, 1645, 2108, 1644, 1807]. **Sinc-collocation** [340, 1645]. **sinc-Galerkin** [1644, 1807]. **sinc-Gauss** [2108]. **Single** [306, 735, 832, 1061, 1586, 1590, 1857, 1858]. **single-curl** [1590]. **Single-grid** [306]. **single-layer** [1061]. **single-phase** [735, 1586, 1857, 1858]. **singly** [492]. **singly-implicit** [492]. **Singular** [1163, 7, 58, 201, 327, 352, 401, 455, 575, 589, 610, 698, 706, 738, 801, 836, 849, 894, 971, 1030, 1086, 1162, 1256, 1323, 1385, 1510, 1511, 1531, 1567, 1588, 1677, 1684, 1705, 1795, 2072, 2071, 2076, 2111, 2116]. **singular-degenerate** [201]. **singularities** [211, 1252, 1254, 1316, 1515, 1641, 1895]. **singularity** [1968]. **singularly** [74, 93, 487, 563, 592, 864, 967, 1479, 1480, 1501, 1509, 1523, 1605, 1608, 1640, 1658, 1725, 1749, 1748, 2093, 2092, 2098, 2171, 2176]. **SIP** [1673, 749]. **SIP-DG** [749]. **Sivashinsky** [41, 1626]. **sixth** [840, 1180, 1375]. **sixth-order** [840, 1180, 1375]. **size** [2, 13, 263, 766, 951]. **sketch** [1802]. **skew** [189, 1211, 1365]. **skew-Hermitian** [189]. **skew-symmetric** [1211, 1365]. **slab** [1148]. **slice** [1747]. **slice-based** [1747]. **slip** [950]. **Sloan** [1145]. **Slobodeckij** [944]. **slow** [2001]. **slowly** [1801]. **SLQ** [1916, 1917]. **Smale** [609, 1560].

small [386, 654, 926, 1873, 1963]. **Smaller** [1431]. **smallest** [2213]. **Smolyak** [793]. **smooth** [70, 71, 163, 240, 802, 887, 1347, 1392, 1415, 1607, 1848, 1852, 2102, 2300]. **Smoothed** [627, 1370]. **Smoothing** [2262, 605, 705, 780, 1288, 2154]. **Smoothness** [1170, 2250, 420, 805, 1117, 1613, 1765, 1774, 2065]. **snapshot** [2044]. **Sneyd** [2245]. **Sobolev** [148, 253, 470, 724, 741, 1117, 1182, 1495, 1537]. **Sobolev-type** [1537]. **softmax** [349]. **software** [708]. **solar** [3]. **solenoidal** [1849]. **solid** [134, 985, 1311, 2296]. **solid-state** [2296]. **solidification** [246, 1454]. **Solution** [513, 531, 1272, 1423, 1570, 92, 93, 149, 158, 163, 162, 303, 366, 391, 413, 412, 453, 454, 489, 507, 575, 574, 577, 607, 605, 688, 689, 699, 706, 717, 727, 745, 801, 816, 824, 833, 902, 928, 947, 992, 1007, 1090, 1110, 1160, 1197, 1224, 1226, 1234, 1290, 1346, 1351, 1419, 1424, 1437, 1438, 1487, 1512, 1532, 1536, 1603, 1615, 1624, 1622, 1669, 1670, 1715, 1755, 1756, 1766, 1767, 1829, 1881, 1885, 1930, 1936, 1942, 1965, 1985, 1991, 1996, 2006, 2004, 2040, 2039, 2041, 2042, 2063, 2072, 2071, 2082, 2117, 2141, 2169, 2201, 2212, 2302]. **solution** [2116, 2159]. **solution-dependent** [453]. **solutions** [90, 160, 165, 181, 217, 308, 418, 460, 503, 502, 573, 660, 678, 778, 814, 849, 867, 935, 1100, 1113, 1124, 1166, 1179, 1257, 1258, 1282, 1315, 1333, 1359, 1398, 1409, 1437, 1582, 1712, 1773, 1791, 1810, 1866, 1879, 1899, 1906, 1962, 1978, 2005, 2086, 2173, 2254, 2299, 2303]. **Solvability** [315, 1042]. **solve** [619, 766, 1373, 1763]. **solver** [640, 1044, 1346, 2260]. **solvers** [856, 1005, 1292, 2172]. **Solving** [302, 641, 858, 915, 1277, 1459, 1789, 1926, 2024, 2032, 2, 48, 142, 238, 407, 594, 630, 648, 744, 973, 1010, 1091, 1134, 1191, 1243, 1300, 1382, 1392, 1425, 1465, 1549, 1596, 1671, 1700, 1748, 1764, 2181, 2180]. **Some** [117, 192, 223, 574, 1698, 1734, 1992, 2041, 2098, 34, 332, 463, 707, 823, 899, 1018, 1372, 1381, 1504, 1677, 1697, 2239]. **SOR** [1548, 1565]. **SOR-like** [1565]. **Soulie** [33]. **source** [150, 568, 1290, 1308, 2010, 2030]. **Space** [30, 126, 145, 211, 319, 427, 13, 14, 74, 87, 127, 152, 253, 307, 317, 324, 446, 496, 555, 617, 615, 683, 735, 783, 787, 891, 905, 936, 949, 948, 989, 1046, 1064, 1114, 1135, 1283, 1286, 1406, 1491, 1627, 1666, 1728, 1732, 1766, 1767, 1858, 1915, 2078, 2126, 2201, 2287, 749]. **Space-time** [319]. **spaced** [1864]. **spaces** [55, 144, 380, 385, 470, 469, 533, 724, 741, 881, 1033, 1071, 1117, 1182, 1195, 1218, 1265, 1292, 1537, 1780, 1855, 1882, 1958, 2109, 2110, 2124, 2227, 721]. **spaces-based** [533, 1071]. **spanning** [1956]. **Sparse** [1207, 2107, 57, 87, 176, 531, 582, 592, 608, 594, 627, 852, 857, 856, 855, 1162, 1163, 1393, 1489, 1558, 1608, 1671, 1723, 1905, 1943, 1980, 2125, 2124, 2227, 2235]. **Sparsified** [262]. **Spatial** [1710, 265, 294, 365, 366, 962, 1792]. **spatially** [999]. **SPD** [850]. **SPDE** [1486]. **SPDEs** [424, 1111, 1467, 1629, 1916, 1917, 2198, 2193, 2174]. **special** [821, 931, 1026, 2035, 2150]. **specified** [692, 1490]. **Spectra** [1961, 1552]. **Spectral** [8, 82, 313, 335, 448, 739, 1271, 1323, 1392, 1534, 1552, 7, 112, 143, 170, 169, 195, 306, 309, 347, 396, 445, 459, 525, 623, 682, 746, 835, 898, 922, 952, 1005, 1030, 1191, 1201, 1215, 1216, 1438, 1462, 1517, 1518, 1653, 1687, 1739, 1778, 1880, 1901, 1926, 1955, 2059, 2085, 2102, 2106, 2137, 2206, 2274]. **spectral-in-time** [1201]. **spectral/** [525]. **spectral/difference** [1518]. **spectrum** [1680, 1687, 2083]. **speed** [484]. **sphere** [177, 269, 473, 922, 996, 1336, 1516, 1558, 1659, 1675, 1991]. **spherical** [130, 922, 1518, 1653]. **spheroidal** [262]. **spine** [24]. **spiral** [676]. **Spline** [547, 1228, 2004, 342, 455, 689, 691, 737, 775, 797, 934, 962, 997, 1115, 1131, 1292, 1413,

1425, 1689, 1788, 1789, 1862, 1918, 2053, 2056, 2098, 2139]. **spline-fitting** [689]. **splines** [266, 268, 270, 438, 451, 469, 478, 631, 676, 742, 798, 851, 963, 1239, 1249, 1319, 1427, 1456, 1620, 1646, 1678, 1806, 1820, 1864, 1911, 1971, 2063, 2066, 2065, 2068]. **split** [581, 789, 1073]. **split-step** [1073]. **split-steps** [789]. **Splitting** [96, 987, 64, 66, 67, 189, 216, 348, 395, 423, 466, 594, 630, 701, 754, 785, 859, 892, 954, 988, 1188, 1232, 1245, 1244, 1254, 1297, 1430, 1448, 1445, 1471, 1517, 1612, 1929, 1946, 2032, 2033, 2194, 2280]. **splittings** [1231, 756]. **splittings-convergence** [1231]. **spreading** [228]. **Spurious** [877, 1315, 1333, 1166, 1359, 1791, 2005, 2086]. **SQP** [622, 1102, 1138]. **square** [531, 553, 599, 805]. **Squared** [812]. **squares** [173, 280, 322, 416, 570, 650, 688, 691, 692, 709, 780, 781, 994, 1519, 1569, 1620, 1676, 1700, 1745, 1750, 1759, 1844, 1843, 1996, 2008, 2079, 2094, 2222]. **squaring** [412, 968]. **Stability** [40, 87, 133, 149, 166, 195, 197, 283, 352, 507, 609, 679, 794, 815, 816, 846, 1947, 1008, 1183, 1221, 1312, 1325, 1360, 1354, 1371, 1622, 1625, 1683, 1691, 2005, 2048, 2078, 2112, 2130, 2189, 2223, 2260, 2282, 1349, 1350, 55, 96, 164, 191, 193, 224, 382, 402, 403, 404, 439, 438, 483, 492, 493, 494, 562, 574, 671, 677, 680, 685, 686, 719, 789, 916, 1026, 1049, 1062, 1076, 1101, 1184, 1186, 1185, 1187, 1233, 1238, 1251, 1275, 1280, 1308, 1406, 1420, 1455, 1470, 1521, 1535, 1578, 1573, 1615, 1630, 1634, 1635, 1655, 1654, 1800, 1929, 1934]. **stability** [1967, 2127, 2149, 2172, 2224, 2255, 721, 758, 2156, 2150, 2151, 2155, 2154, 1577]. **Stabilization** [30, 1525, 1575, 220, 321, 625, 733, 937, 1054, 1181, 1561, 1617, 1706, 750]. **stabilized** [5, 14, 135, 187, 221, 489, 850, 1012, 1102, 1229, 1247, 1301, 1499, 1591, 1830, 2034, 2047, 2122, 722, 274, 275]. **Stable** [246, 247, 258, 568, 823, 1165, 1633, 35, 288, 590, 591, 654, 678, 924, 1118, 1211, 1224, 1277, 1328, 1375, 1384, 1448, 1522, 1553, 1572, 1656, 1700, 1706, 1773, 2047, 2170, 2279, 2296, 750, 755]. **stably** [288]. **stage** [70, 1719, 2027]. **staggered** [646, 1136, 1259, 2294, 2293]. **Standard** [165, 125, 179, 416, 1651]. **starlike** [1863]. **stars** [1361, 2165]. **starting** [509]. **state** [54, 157, 435, 605, 910, 915, 1583, 2148, 2296]. **state/Hopf** [2241]. **states** [953]. **static** [134, 2178]. **stationary** [149, 813, 843, 890, 950, 960, 1020, 1407, 1533, 1773, 1875]. **statistical** [1866, 1889]. **Steady** [2241, 157, 223, 318, 915, 1122, 1398, 2148]. **Steady-state** [2241, 157, 915, 2148]. **Steady-state/Hopf** [2241]. **steepest** [710, 711, 726, 746, 1061, 1176]. **Stefan** [413, 517, 621, 735, 832, 907, 903, 1299, 1559, 1679, 1857, 1858, 2084, 2148, 2173]. **Stehfest** [1513]. **Steklov** [86, 1048, 1317, 1769, 2184, 2252]. **stencil** [654]. **stencils** [741]. **Step** [1803, 2, 212, 263, 479, 509, 670, 766, 902, 1067, 1073, 1138, 1175, 1210, 1440, 1441, 1533, 1599, 2011, 2041]. **step-size** [766]. **steplength** [1089, 1938]. **stepping** [18, 88, 125, 529, 597, 834, 1453, 1597, 1623, 1792, 1794, 1937, 1974, 2057]. **steps** [789, 1055, 1701, 2262]. **stepsize** [499, 1220]. **Stiefel** [1318]. **stiff** [551, 708, 856, 1269, 1302, 1334, 1829, 2159]. **Stirling** [1775]. **Stochastic** [389, 598, 1629, 5, 120, 126, 127, 200, 201, 276, 295, 326, 329, 366, 377, 379, 405, 423, 428, 467, 530, 579, 584, 599, 596, 597, 666, 699, 786, 839, 915, 984, 983, 1111, 1119, 1134, 1266, 1295, 1297, 1321, 1344, 1390, 1389, 1432, 1445, 1453, 1488, 1498, 1577, 1578, 1567, 1583, 1600, 1612, 1619, 1628, 1666, 1682, 1737, 1738, 1757, 1776, 1808, 1810, 1901, 1915, 1924, 2112, 2125, 2218, 2174, 865]. **stochastically** [80]. **Stokes** [613, 974, 976, 1188, 1301, 1591, 11, 30, 29, 33, 62, 123, 129, 128, 135, 136, 137, 168, 181, 180, 212, 215, 265, 272, 278, 310, 306, 309, 308,

312, 314, 318, 329, 369, 428, 430, 436, 439, 438, 485, 497, 501, 512, 534, 554, 612, 657, 786, 803, 804, 838, 850, 885, 930, 950, 960, 984, 1019, 1024, 1039, 1054, 1055, 1056, 1111, 1133, 1202, 1227, 1238, 1247, 1281, 1314, 1394, 1411, 1420, 1442, 1446, 1493, 1494, 1514, 1535, 1580, 1571, 1601, 1632, 1643, 1674, 1681, 1688, 1718, 1724, 1804, 1811, 1849, 1875, 1927, 1930, 1950]. **Stokes** [757, 1976, 2008, 2007, 2058, 2095, 2169, 2294, 2292, 722, 274, 750, 2175]. **Stokes-Biot** [1571]. **Stopping** [1743, 379, 2179, 2159]. **story** [1784]. **straight** [1965]. **straight-edged** [1965]. **straightening** [1902]. **strain** [372]. **strain-limiting** [372]. **strains** [1963]. **Strang** [572]. **Strang-type** [572]. **strategies** [85, 276, 1308, 1453, 1477, 1873, 2221]. **strategy** [2, 70, 1646, 1720]. **Stream** [1950, 309, 1777]. **stream-function** [309]. **streamline** [1196, 2089]. **streamline-diffusion** [2089]. **stress** [536, 1051, 1133]. **stresses** [656]. **stretched** [1591]. **strict** [269, 419]. **Strictly** [473]. **string** [1902]. **strip** [1746]. **strip-based** [1746]. **stroboscopic** [1986]. **Strong** [280, 329, 423, 597, 694, 1390, 1389, 1583, 1600, 1619, 1688, 1915, 2198, 800, 1038, 1790, 1853, 1934, 2199]. **strongly** [674, 698, 1143, 1423, 1529, 1624, 1924, 2168]. **structural** [301, 1049, 1050, 1827]. **structurally** [1700]. **Structure** [1057, 1624, 96, 319, 473, 688, 795, 988, 987, 1051, 1310, 1576, 1673, 1836, 1874, 1970, 2208, 2272]. **Structure-preserving** [1057, 2272]. **structured** [13, 824, 2162]. **structures** [1396]. **studies** [289]. **Study** [939, 969]. **Sturm** [290, 343, 401, 942, 1030, 1090, 1160, 1300, 1920]. **Sub** [438, 1639, 1792]. **sub-diffusion** [1792]. **Sub-Grid** [438]. **sub-sampled** [1639]. **subcycling** [859]. **subdiffusion** [1401, 1402, 1403, 1406, 1432, 1436, 1566, 1661]. **subdivision** [779, 1170, 1336, 1704, 1774, 1775, 1959, 2250, 2251]. **subgradient** [2]. **Subgrid** [1181, 181]. **subgrid-scale** [181]. **subject** [745, 2288]. **submanifolds** [783, 1543]. **submatrix** [2213]. **Subproblem** [979]. **Subsampled** [282, 367]. **subsequent** [1120]. **subsonic** [2090]. **subspace** [970, 1377]. **subspace-breaking** [1377]. **substructuring** [1746, 1747]. **subtraction** [978]. **successive** [897, 1235, 1690]. **Sufficient** [967, 260]. **suitable** [631]. **sum** [281, 349, 781, 892]. **sums** [282, 414, 1455, 2214]. **sup** [224, 323, 438, 1238, 1522, 1706, 750]. **super** [615, 659, 841, 1176, 2199, 831]. **super-convergence** [841]. **super-convergent** [659]. **super-linear** [615, 1176, 2199, 831]. **Supercloseness** [1617, 1640]. **superconducting** [913, 2087]. **superconductivity** [443, 904, 910]. **superconductors** [249]. **Superconvergence** [868, 1194, 1507, 1595, 1732, 1941, 284, 417, 457, 1641, 2001, 2069, 2096, 2238]. **Superconvergent** [1551, 2290, 657, 656, 1023, 1927]. **superiorization** [2]. **superlinear** [1906]. **superposition** [81]. **supersmoothness** [2065]. **SUPG** [722, 274]. **SUPG-stabilized** [722, 274]. **supported** [624]. **Supraconvergence** [217]. **supraconvergent** [1052]. **surface** [54, 66, 67, 199, 237, 262, 451, 797, 798, 880, 890, 911, 964, 1115, 1237, 1238, 1376, 1413, 1482, 1484, 1949, 1950, 2177]. **surface-fitting** [797]. **surfaces** [163, 327, 345, 511, 759, 844, 875, 876, 1020, 1219, 1218, 1229, 1230, 1386, 1393, 1443, 1482, 1483, 1525, 1638, 1830, 2177]. **surfactant** [228]. **survey** [1876, 2021]. **Sushi** [937]. **SVD** [836]. **SWIFT** [584]. **switching** [60]. **Sylvester** [1695]. **Symm** [917, 1549, 2261]. **Symmetric** [1054, 271, 447, 544, 641, 653, 658, 656, 855, 1947, 982, 1211, 1345, 1365, 1375, 1408, 1414,

1596, 1660, 1713, 1723, 1731, 1807, 1823, 1845, 1868, 1869, 1905, 1975, 2031, 2108, 2109, 2194]. **symmetric-triangular** [2194]. **symmetrizable** [1421]. **Symmetrization** [1644, 227]. **symmetry** [60, 473, 778, 1378, 1771, 2241]. **symmetry-breaking** [1771, 2241]. **Symplectic** [810, 183, 509, 599, 598, 1611, 1758, 1821]. **symplecticity** [1213]. **synthesis** [1092]. **system** [23, 45, 232, 278, 443, 497, 517, 535, 613, 653, 697, 738, 786, 837, 974, 976, 1174, 1264, 1301, 1411, 1466, 1582, 1605, 1624, 1643, 1649, 1658, 1811, 1937, 1973, 2079, 2090, 2095, 2212, 2271, 2272, 2293]. **Systems** [1272, 26, 48, 51, 88, 149, 184, 188, 214, 271, 297, 319, 337, 353, 411, 427, 442, 453, 513, 524, 523, 531, 551, 571, 572, 581, 580, 587, 615, 598, 665, 701, 708, 716, 747, 778, 795, 810, 824, 858, 895, 896, 920, 957, 1013, 1011, 1016, 1020, 1134, 1142, 1153, 1212, 1250, 1273, 1277, 1280, 1312, 1324, 1344, 1373, 1382, 1421, 1422, 1453, 1488, 1511, 1565, 1600, 1603, 1673, 1685, 1686, 1705, 1725, 1731, 1764, 1807, 1826, 1846, 1869, 1873, 1901, 1970, 1992, 2039, 2141, 2163, 2204, 2260, 2269, 2270, 1349]. **Szego** [1872, 753].

T [631, 1297]. **T-splines** [631]. **Takens** [338, 1378, 1377, 2241]. **Talenti** [1038]. **tangent** [75]. **Tangential** [1237]. **taut** [1902]. **Taylor** [224, 438, 1694, 2031]. **technical** [1174]. **technique** [439, 450, 1047, 1680, 1943]. **techniques** [205, 442, 452, 779, 859, 1096, 1644]. **temperature** [1937]. **temperature-dependent** [1937]. **temporal** [1420, 1649]. **Tensor** [964, 425, 592, 814, 1237, 1393, 1639, 1695, 1951, 2089, 2107, 2280]. **Tensor-product** [964, 2089, 2280]. **term** [364, 377, 506, 1111, 1309, 1661]. **terms** [568, 1025, 1087, 1290, 2010, 2030, 720]. **test** [446, 707, 1302, 2026, 2142]. **Testing** [2043, 644, 2162]. **tetrahedra** [1965]. **tetrahedral** [1508, 2000, 2066]. **textile** [1174]. **texture** [906]. **th** [1577, 1578]. **their** [72, 146, 574, 708, 955, 1316, 1647, 1754, 1783, 2058, 2096, 2188, 2235]. **theorem** [146, 1361, 1910]. **theorems** [1050, 1855, 2190]. **theoretic** [2109]. **Theory** [419, 979, 636, 767, 886, 905, 1066, 1160, 1303, 1356, 1560, 1576, 1596, 2051, 2172, 1955]. **There** [809]. **thermistor** [1047]. **thermo** [370, 1122]. **thermo-electromagnetic** [1122]. **thermo-hydro-mechanical** [370]. **thermoelastic** [1311]. **theta** [142]. **thin** [34, 96, 228, 987, 1131, 2018, 2063]. **thin-walled** [96, 987]. **third** [56, 617, 2295]. **third-kind** [56]. **third-order** [617, 2295]. **Thomas** [50, 818]. **Three** [1348, 70, 136, 268, 930, 1061, 1188, 1202, 1248, 1309, 1314, 1384, 1416, 1584, 1590, 1681, 1747, 1939, 2027, 2026, 2085, 2095, 2132, 2292, 2297]. **three-body** [2026]. **three-dimensional** [1061, 1188, 1248, 1590, 1939, 2085, 2297]. **three-dimensions** [136]. **three-field** [1584, 2292]. **three-fields** [1681]. **three-phase** [1416]. **three-stage** [2027]. **three-term** [1309]. **three-time-level** [1384]. **Tikhonov** [362]. **Time** [30, 204, 208, 221, 1053, 1135, 1152, 1714, 1813, 10, 18, 29, 49, 74, 87, 88, 125, 126, 127, 138, 145, 150, 196, 207, 211, 212, 216, 310, 307, 314, 317, 319, 329, 427, 529, 566, 603, 597, 651, 683, 719, 751, 754, 787, 804, 811, 834, 859, 865, 876, 907, 905, 946, 949, 948, 956, 983, 1010, 1018, 1046, 1054, 1051, 1064, 1069, 1074, 1188, 1201, 1207, 1227, 1243, 1247, 1249, 1256, 1264, 1280, 1311, 1322, 1342, 1359, 1384, 1388, 1395, 1398, 1399, 1400, 1403, 1406, 1421, 1430, 1442, 1453, 1459, 1466, 1467, 1471, 1480, 1483]. **time** [1484, 1491, 1502, 1517, 1524, 1569, 1597, 1599, 1606, 1613, 1623, 1637, 1638, 1648, 1653, 1666, 1728, 1732, 1766, 1767, 1792, 1794, 1793, 1915, 1937, 1945, 1946, 1963, 1969, 1974, 1984,

2029, 2054, 2057, 2078, 2082, 2100, 2134, 2191, 2240, 2256, 2262, 2269, 2271, 2299, 750, 2175]. **time-accuracy** [1256]. **Time-dependent** [208, 221, 1813, 10, 207, 212, 310, 314, 651, 751, 804, 1054, 1247, 1311, 1388, 1406, 1442, 1471, 1480, 1648, 1732, 2082, 2191, 750, 2175]. **time-discrete** [1766, 1767, 2134, 2269]. **time-discretization** [865]. **Time-domain** [204, 1051, 1524]. **time-evolution** [1243]. **time-fractional** [49, 603, 1322, 1400, 1459, 1599, 1793, 2299]. **time-harmonic** [1569, 1613, 1653, 1946]. **time-marching** [1227]. **time-parallel** [1243]. **time-periodic** [2082]. **time-space** [683, 1064]. **time-splitting** [216, 754, 1517]. **time-stepping** [18, 529, 597, 834, 1453, 1597, 1792, 1794, 1937, 1974, 2057]. **time-subcycling** [859]. **time-varying** [1280]. **times** [1289]. **Timoshenko** [1263]. **Toda** [510]. **Toeplitz** [571, 575, 1143]. **Toint** [1905]. **tolerance** [1270]. **tomography** [1404, 1429, 1896]. **tool** [975]. **topology** [1956]. **torsion** [305]. **Total** [239, 241, 433, 1214, 253, 393, 394, 505, 1865]. **totally** [403, 404]. **touching** [700, 1555]. **TPFA** [841]. **Trace** [1027, 1028, 1376, 2075, 1949]. **Tracking** [1868, 1559, 1967]. **trajectory** [679, 1716]. **Transfer** [1136, 718, 1033, 1147]. **transform** [112, 298, 667, 685, 765, 1217, 1704, 1739, 1958, 2047, 2108]. **transformation** [343, 1715, 1801, 1919, 2029, 2037, 2300]. **transformations** [174, 449, 1723, 1841]. **transforms** [94, 154, 515, 1363, 1714, 2248, 2249]. **transient** [272, 303, 482, 565, 1310, 2058]. **transition** [1018]. **transmission** [391, 498, 1252, 1419, 1730, 2106, 2246]. **transport** [3, 27, 69, 196, 406, 529, 632, 882, 883, 1010, 1040, 1066, 1148, 1570, 1573, 1596, 1664, 2020]. **Transportation** [1343]. **trapezoidal** [789, 1684, 1980]. **treatment** [1010, 1489, 2156]. **tree** [1511]. **tree-based** [1511]. **Trees** [500, 1956]. **Trefftz** [1348, 1491]. **trial** [12]. **triangle** [1338]. **triangular** [174, 777, 1749, 2000, 2081, 2194]. **triangularization** [2136]. **triangulation** [1971]. **triangulations** [874]. **trick** [908]. **tridiagonal** [716, 2060]. **Trigonometric** [1264, 1742, 164, 466]. **trilinear** [542]. **trimmed** [468]. **Trivariate** [387]. **Trotter** [785]. **true** [2299]. **Truncated** [1154]. **Truncation** [1685, 694, 1116, 1577, 1578, 2014, 2152]. **Trust** [81, 979, 190, 1138, 1157, 1158, 1169, 1904, 2126, 2275]. **Trust-Region** [979, 81, 190, 1158, 2126]. **trust-region-free** [1138]. **tumour** [842, 880]. **tuned** [1017]. **Turán** [1754]. **turbulent** [1939]. **turning** [1770, 2070]. **TUSLA** [1594]. **TV** [906]. **TVD** [2129]. **TVNE** [2295]. **Two** [263, 316, 518, 1025, 1314, 1439, 1574, 1719, 1817, 2027, 2114, 7, 14, 25, 45, 70, 71, 136, 153, 174, 188, 212, 215, 266, 329, 340, 343, 359, 361, 391, 407, 415, 428, 433, 454, 528, 588, 589, 608, 602, 670, 737, 816, 820, 894, 914, 944, 948, 1015, 1030, 1034, 1057, 1172, 1222, 1259, 1262, 1268, 1295, 1299, 1383, 1394, 1436, 1553, 1561, 1608, 1650, 1652, 1656, 1658, 1662, 1663, 1667, 1679, 1709, 1741, 1746, 1766, 1767, 1789, 1849, 1890, 1902, 1932, 1939, 2005, 2040, 2053, 2088, 2093, 2092, 2134, 2176, 2245, 2246, 2257]. **two-** [136]. **two-by-two** [188]. **two-dimensional** [71, 153, 266, 329, 391, 407, 428, 454, 944, 948, 1259, 1268, 1383, 1436, 1553, 1650, 1656, 1709, 1766, 1767, 1849, 2245, 2246]. **two-factor** [1652]. **Two-grid** [518]. **Two-level** [1439, 2114, 608, 1719, 2257]. **two-parameter** [343, 1890]. **two-phase** [25, 45, 433, 528, 1057, 1299, 1394, 1679, 1932]. **Two-point** [263, 1025, 7, 340, 361, 588, 589, 894, 1172, 1262, 1789, 2053, 2088, 2093, 2092, 2176]. **Two-scale** [1574, 1817, 1608]. **Two-sided** [316]. **Two-stage** [1719, 2027, 70]. **two-step** [212, 670]. **twofold** [1059, 1068, 1072]. **type** [41, 130, 272, 344, 351, 442, 572, 645, 702,

763, 790, 834, 856, 872, 910, 1012, 1013, 1025, 1042, 1131, 1144, 1151, 1215, 1283, 1286, 1299, 1339, 1383, 1428, 1466, 1507, 1518, 1537, 1562, 1611, 1627, 1661, 1662, 1682, 1686, 1706, 1709, 1741, 1758, 1837, 1847, 1981, 2043, 2066, 2075, 2084, 2107, 2132, 2178, 2187, 2189, 2221, 2248, 2249, 2252, 2255, 2290, 755, 2174, 146, 706, 801, 807, 1141, 1221, 1409, 1751, 2015, 2072, 2071, 2093, 2092]. **type-6** [2066]. **type-II** [910]. **types** [1348].

ultraspherical [1215, 1926]. **Unbiased** [1516]. **unbounded** [1379, 1886, 1766, 1767]. **uncertain** [1652, 1893]. **uncertainty** [52, 692, 1148, 1393]. **Unconditional** [1248]. **Unconditionally** [654, 203, 1448, 1572, 1652, 1656, 2219]. **unconstrained** [143, 730, 1904, 2123, 2277]. **underdetermined** [675, 1240]. **underflow** [978]. **understanding** [382]. **unfitted** [238, 240, 488, 485, 532, 819, 987, 1540, 2045, 2175]. **unfitted-mesh** [987]. **unidimensional** [832, 1586, 1857]. **Unified** [1283, 1359, 2267, 543, 667, 765, 807, 905, 1481, 1566, 1606, 2128, 2281, 720]. **Uniform** [481, 573, 706, 719, 796, 811, 1024, 1128, 1469, 1657, 1794, 1883, 2056, 2191, 2255, 2278, 216, 327, 417, 574, 929, 967, 1256, 1342, 1467, 1501, 1748, 1984, 2001]. **uniform-in-time** [1342]. **Uniformly** [2295, 1, 35, 580, 609, 651, 1658, 2098]. **unilateral** [119, 292, 802, 2114]. **unipolar** [516]. **uniqueness** [2201]. **unit** [480, 922, 1234, 1675, 1884]. **Unitarity** [1381]. **unitary** [1332]. **unity** [889]. **Univariate** [267, 471, 780, 781]. **unknown** [1242, 1993]. **unsteady** [555, 820, 1912, 2091, 722, 274]. **unstructured** [936, 1931]. **unsymmetric** [608]. **updates** [1481, 1975, 2288, 2289]. **Updating** [1980, 1845, 1905]. **upper** [1980]. **Upwind** [1444, 27, 92, 403, 404, 406, 465, 556, 568, 1329, 1604, 1657, 1748, 1960, 1973]. **upwind-** [1748]. **upwinding** [2130]. **Use** [1505, 173, 207, 1234, 1481, 1914, 2047]. **user** [2036]. **user-friendly** [2036]. **Using** [715, 2149, 2, 53, 142, 221, 238, 343, 386, 424, 471, 513, 514, 525, 631, 682, 705, 716, 742, 798, 868, 915, 920, 937, 966, 1055, 1132, 1308, 1319, 1399, 1435, 1536, 1620, 1633, 1655, 1707, 1728, 1738, 1752, 1811, 2063, 2072, 2071, 2286, 758]. **Uzawa** [1740]. **Uzawa-based** [1740].

V [1338]. **validity** [480]. **valuation** [1321, 2306]. **value** [7, 63, 64, 92, 131, 247, 287, 291, 340, 341, 361, 403, 404, 406, 588, 589, 619, 603, 594, 628, 674, 765, 894, 1059, 1101, 1105, 1162, 1163, 1172, 1262, 1305, 1333, 1375, 1383, 1449, 1523, 1657, 1702, 1765, 1789, 1895, 1912, 2053, 2088, 2093, 2092, 2097, 2098, 2170, 2176, 2192, 2230, 2159, 2152, 2153]. **valued** [297, 873, 1159, 1468, 1550, 2251]. **values** [1385, 2025]. **Vandermonde** [1272, 2163]. **Vandermonde-like** [1272]. **vanishing** [460]. **Variable** [381, 82, 150, 198, 273, 324, 385, 427, 509, 525, 616, 628, 667, 714, 1055, 1183, 1418, 1417, 1588, 1599, 1623, 1737, 1844, 1898, 1981, 2261, 2276, 2299]. **variable-degree** [616]. **variable-metric** [714]. **variable-order** [2299]. **variable-step** [509, 1599]. **variables** [878, 1583]. **variably** [408]. **variance** [691]. **variant** [927, 1156]. **variants** [1662, 2052]. **variate** [1162]. **variation** [253, 393, 394, 505, 919, 1214]. **Variational** [1249, 1471, 1488, 1581, 1954, 1969, 1974, 2002, 2113, 179, 221, 249, 247, 389, 397, 614, 637, 717, 892, 907, 909, 1059, 1113, 1261, 1290, 1293, 1328, 1428, 1450, 1547, 1546, 1561, 1798, 1799, 1821, 1839, 1867, 1989, 1999, 2078, 2107, 2114]. **variational-hemivariational** [717]. **variational-iterative** [1989]. **Variational-splitting** [1471]. **varieties** [2162]. **varying** [554, 768, 1280]. **Vector** [1159, 169, 965, 1230, 1376, 1774, 2064, 2104, 2121]. **vector-Laplace** [1376]. **Vector-valued** [1159]. **vectors**

[2, 836, 1103, 2103]. **velocity** [433, 501, 1601]. **velocity-based** [433]. **VEM** [273]. **VEMs** [1566]. **Vera** [1120]. **Verification** [449]. **version** [261, 327, 1085, 1083, 1225, 1267, 1306, 1796, 2000, 2192, 2236]. **versions** [2076]. **versus** [689, 1146, 1162, 1163, 1270]. **vertex** [921, 1052, 1062]. **vertex-centered** [921]. **very** [672]. **via** [208, 298, 429, 593, 668, 669, 824, 858, 1172, 1243, 1393, 1428, 1459, 1704, 1714, 1715, 1805, 1827, 2253]. **vibration** [301, 1263]. **vibrations** [254]. **Vibro** [1910]. **Vibro-impact** [1910]. **VIEs** [56]. **viewpoint** [989]. **Virtual** [123, 520, 736, 1058, 2182, 78, 121, 501, 522, 625, 768, 769, 1019, 1544, 1730, 1778, 1777, 2183, 2184, 723, 721, 275]. **viscoelastic** [221, 2256]. **viscoelasticity** [31, 1528]. **viscoplastic** [1532]. **viscosity** [1188, 1285]. **viscosity-splitting** [1188]. **viscous** [405, 1446, 1883]. **Vlasov** [214, 615, 1583, 1944, 831]. **volatilities** [1321]. **volatility** [1652, 1893]. **Volterra** [1670, 191, 197, 283, 352, 455, 454, 458, 456, 457, 719, 807, 1179, 1215, 1316, 1323, 1371, 1424, 1567, 1588, 1634, 1635, 1636, 1651, 1669, 1709, 1940, 2015, 2024, 2111, 2187, 2228, 2255, 2282, 2116, 2156]. **Volterra-type** [807, 2015]. **Volume** [98, 3, 25, 90, 100, 141, 333, 332, 339, 405, 406, 410, 433, 506, 516, 528, 543, 557, 567, 565, 564, 566, 581, 583, 632, 661, 738, 837, 841, 844, 921, 935, 936, 939, 938, 976, 1052, 1261, 1321, 1421, 1422, 1436, 1514, 1643, 1783, 1797, 1811, 1826, 1866, 1988, 2063, 2196, 2265, 2266, 2267, 2280, 2306, 102, 105, 107, 109]. **volume-preserving** [2280]. **volumes** [517, 720]. **volumetric** [1534]. **Vortex** [2062, 2286]. **vortices** [913, 2087]. **vorticity** [79, 309, 1650]. **Vries** [687, 834, 1294, 1512, 1847, 2004].

W [111]. **Waals** [228]. **Wachspress** [1141]. **Wachspress-type** [1141]. **WAF** [2120]. **walk** [886, 1516]. **walk-on-sphere** [1516]. **walled** [96, 987]. **Warming** [2128]. **Warming-Beam** [2128]. **water** [124, 125, 302, 395, 1259, 1912]. **waterbag** [331]. **Wave** [390, 112, 194, 262, 293, 298, 553, 578, 586, 666, 736, 825, 871, 919, 949, 948, 947, 952, 980, 983, 1077, 1082, 1135, 1178, 1207, 1243, 1283, 1284, 1286, 1293, 1310, 1311, 1347, 1393, 1491, 1497, 1529, 1611, 1662, 1663, 1668, 1739, 1766, 1767, 1796, 1912, 1924, 2014, 2189, 2192, 2217, 2236, 2256, 2285]. **Wave-number** [390]. **wave-packet** [112, 1739]. **wave-structure** [1310]. **wave-thermoelastic** [1311]. **wave-type** [1283, 1286, 1662]. **waveform** [1979, 2240]. **waveguide** [1534]. **Wavelet** [321, 452, 724, 584, 592, 928, 932, 2077, 2227]. **Wavelet-based** [724, 584, 928]. **Wavelet-Fourier** [452]. **wavelets** [1809]. **Wavenumber** [586, 1653]. **waves** [211, 929, 1035]. **Weak** [183, 467, 579, 612, 680, 1478, 1776, 1853, 2199, 68, 181, 363, 446, 1198, 1741, 1786]. **weakened** [956]. **weakly** [216, 327, 352, 455, 575, 610, 672, 801, 1323, 1567, 1582, 1588, 1795, 1826, 1890, 2076, 2111, 2116]. **Weber** [1097]. **wedge** [158]. **Weierstrass** [684]. **weight** [578, 1699, 1872]. **Weighted** [487, 1870, 117, 225, 926, 1117, 1271, 1379, 1745, 1818, 1923, 2109, 2110]. **weights** [1000, 1452, 1872, 2135]. **Weiner** [1697]. **Weiner-Hopf** [1697]. **Well** [26, 1796, 558, 672, 1103, 1819, 1976]. **well-conditioned** [1103]. **well-posed** [672, 1976]. **Well-posedness** [26, 1796]. **well-reservoir** [558]. **Wendroff** [1627, 2128]. **Wendroff-type** [1627]. **Wentzell** [213]. **were** [1199]. **Westervelt** [1430]. **which** [1143, 2304]. **white** [366, 1242, 1619]. **whole** [2135]. **Wick** [1682]. **wide** [1904]. **wider** [1142]. **widths** [664]. **Wiener** [860, 1147]. **Willmore** [247]. **Wilson** [606]. **Wimbledon** [111, 111].

Winther [536]. **withdrawal** [1330]. **without** [622, 1045, 1223, 1518, 1832, 1903, 2038, 2299]. **work** [852, 857]. **worst** [713, 1871]. **worst-case** [713]. **Wrap** [1250]. **Wrap-around** [1250].

Xin [2016].

years [1120]. **Yee** [1931]. **Yee-like** [1931]. **yielding** [1071]. **Yosida** [1205].

Zakharov [1264, 2090]. **zeros** [77, 779, 1149, 1358, 1696, 1697, 1994, 2020].

References

Abbasi:2019:PDE

[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`.

Abbasi:2024:NSS

[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`.

Abdel:2024:NAF

[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`.

Abdulle:2015:FDA

[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://imajna.oxfordjournals.org/content/35/1/133`.

Abdulle:2023:CAE

[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`.

Ablowitz:1991:DSD

[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).

Abu-Zaid:1994:FDM

[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).

Acebron: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 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. Papageorgiou, and Yiorgos-Sokratis Smyrlis. Linearly implicit methods for a semilinear 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). 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-Alvárez, 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 polynomial 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:2025:OEA

[75] Rong An, Yonglin Li, and Weiwei Sun. Optimal error analysis of the normalized tangent plane FEM for Landau–Lifshitz–Gilbert equation. *IMA Journal of Numerical Analysis*, 45(5):3109–3137, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/5/3109/7933708`.

An:2022:ABE

[76] 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

[77] 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

[78] 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

[79] 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

[80] 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

[81] 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

[82] 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

[83] 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 [84].

Andreani:2017:SOS

[84] 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 [83].

Andreani:2022:CAL

[85] 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

[86] 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

[87] 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

[88] 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

[89] 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

[90] 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

[91] 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

[92] 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

[93] 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

[94] 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

[95] 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/cgi/content/abstract/27/2/366`; `http://imajna.oxfordjournals.org/cgi/reprint/27/2/366`.

Annese:2023:SSL

[96] 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

[97] 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

[98] 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

[99] 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

[100] 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

[101] 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

[102] 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

[103] 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

[104] 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

[105] 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

[106] 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

[107] 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

[108] 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

[109] 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

[110] 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

[111] 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

[112] 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 [1739].

Anselone:1987:DCA

[113] P. M. Anselone and R. Ansorge. Discrete closure and asymptotic (quasi-) regularity in discretization algorithms. *IMA Journal of Numerical Analysis*, 7(4):431–448, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Antil:2023:AFH

[114] 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

[115] 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

[116] 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

[117] 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

[118] 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

[119] 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

[120] Rikard Anton, David Cohen, and Lluis 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

[121] 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

[122] 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

[123] 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

[124] 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

[125] 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

[126] 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

[127] 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/imajna/article/44/3/1862/7234090.

Apel:2022:NPR

[128] 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/imajna/article/42/1/392/6065723.

Apel:2001:NCF

[129] 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

[130] 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

[131] 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/imajna/article/40/1/474/5239883.

Apel:2018:EEP

[132] 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/imajna/article/38/4/1984/4389275`.

Araujo:2015:SFD

[133] 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://imajna.oxfordjournals.org/content/35/3/1381`.

Araya:2011:FEA

[134] 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

[135] 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

[136] 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

[137] 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

[138] 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

[139] 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

[140] 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

[141] 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

[142] 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

[143] 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

[144] W. Arendt, I. Chalendar, and R. Eymard. 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

[145] W. Arendt, I. Chalendar, and R. Eymard. 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

[146] Ioannis K. Argyros. On a new Newton-Mysovskii-type theorem with appli-

cations 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

[147] 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

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

[149] 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

[150] 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

[151] 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

[152] 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

[153] 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

[154] 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

[155] 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

[156] 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

[157] 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

[158] 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

[159] 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

[160] 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

[161] 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

[162] 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

[163] 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

[164] Anthony P. Austin and Kuan Xu. On the numerical stability of the second barycentric formula for trigonometric 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

[165] 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

[166] 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

[167] 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

[168] 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

[169] M. Azaïez, 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

[170] M. Azaïez, 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

[171] 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

[172] Francis R. A. Aznaran, Patrick E. Farrell, Charles W. Monroe, and Alexander J. Van-Brunt. 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

[173] 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

[174] 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

[175] 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

[176] 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

[177] 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

[178] 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

[179] 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

[180] 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

[181] 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

[182] 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

[183] 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

[184] 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

[185] 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

[186] 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

[187] 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

[188] 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

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

[190] 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

[191] 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

[192] 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

[193] Christopher T. H. Baker and Christopher A. H. Paul. Computing stability regions — Runge–Kutta methods 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

[194] 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

[195] 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

[196] 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

[197] 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

[198] 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

[199] 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

[200] Lŭbomír Baňas, Zdzislaw 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 (electronic). URL http://imajna.oxfordjournals.org/content/34/2/502.full.pdf+html.

Banas:2024:NAS

[201] Łubomír Baňas, 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

[202] 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

[203] 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

[204] Lehel Banjai. Time-domain Dirichlet-to-Neumann map and its discretization. *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

[205] 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

[206] 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

[207] 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://academic.oup.com/imajna/article/39/3/1134/5032994`.

Banjai:2022:TDA

[208] 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

[209] 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

[210] 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

[211] 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

[212] 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

[213] 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

[214] 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

[215] 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

[216] 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

[217] 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://imanum.oxfordjournals.org/cgi/reprint/25/4/797`.

Barboteu:2002:NAB

[218] Mikäel 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

[219] 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

[220] Gabriel R. Barrenechea, Erik Burman, Ernesto Cáceres, and Johnny Guzmán. 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

[221] 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

[222] Gabriel R. Barrenechea, Emmanuil H. Georgoulis, Tristan Pryer, and Andreas Veeser. 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

[223] 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

[224] 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

[225] 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

[226] 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

[227] J. W. Barrett and K. W. Morton. Optimal Petrov–Galerkin methods through approximate symmetriza-

tion. *IMA Journal of Numerical Analysis*, 1(4):439–468, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Barrett:2004:CFE

[228] 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

[229] 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 IJNADH. 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

[230] 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 IJNADH. 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

[231] 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 IJNADH. 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

[232] 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 IJNADH. 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

[233] 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 [234].

Barrett:2018:FEA

[234] 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 [233].

Barrett:1991:FEA

[235] 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

[236] 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/imajna/article/41/3/1641/5865040`.

Barrett:2021:PPF

[237] 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/imajna/article/41/3/1668/5893597`.

Barrett:1984:FEM

[238] 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

[239] 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

[240] 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

[241] 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

[242] 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

[243] 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

[244] John W. Barrett, Harald Garcke, and Robert Nürnberg. Numerical approximation 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

[245] 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

[246] 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

[247] 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

[248] 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

[249] John W. Barrett and Leonid Prigozhin. Sandpiles and superconductors: nonconforming 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

[250] 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/reprint/29/4/937`.

Barrios:2010:PPE

[251] 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

[252] 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

[253] 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

[254] 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

[255] 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

[256] 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

[257] 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

[258] 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

[259] 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`.

Bartels:2025:NSC

[260] Sören Bartels and Philipp Tscherner. Necessary and sufficient conditions for avoiding Babuska's paradox on simplicial meshes. *IMA Journal of Numerical Analysis*, 45(3):1300–1319, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1300/7741575`.

Bartholomew-Biggs:1988:GCV

[261] 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

[262] Hélène Barucq, M'Barek Fares, Carola Kruse, and Sébastien 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

[263] Jonathan Barzilai and Jonathan M. Borwein. Two-point step size gradient methods. *IMA Journal of Numerical Analysis*, 8(1):141–148, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bauermeister:2010:FEA

[264] 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

[265] 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

[266] 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

[267] 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

[268] 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

[269] 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

[270] 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

[271] 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

[272] 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

[273] 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

[274] 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 [722].

daVeiga:2025:CSV

[275] 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

[276] 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

[277] 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

[278] 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

[279] 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

[280] S. Bellavia and B. Morini. Strong local convergence properties of adaptive regularized methods for nonlinear 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

[281] 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/imajna/article/41/1/764/5824083.

Bellavia:2020:SIN

[282] 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/imajna/article/40/4/2309/5528032.

Bellen:1990:SAR

[283] 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

[284] 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

[285] 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

[286] 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://imajna.oxfordjournals.org/content/31/1/25.full.pdf+html.

Beltran:2022:MVC

[287] 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/imajna/article/42/4/2959/6374201.

Beltran:2024:WCF

[288] 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/imajna/article/44/2/886/7181045.

Belward:1985:FSA

[289] J. A. Belward. Further studies of the application of constrained minimization 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

[290] 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

[291] 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

[292] 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

[293] 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

[294] 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

[295] 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

[296] Brahim Benouahmane, Cuyt Annie, and Irem Yaman. Near-minimal cubature 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

[297] 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

[298] 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

[299] 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`.

Bermejo:2025:HOL

[300] 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

[301] 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

[302] 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

[303] Alfredo Bermúdez, Bibiana López-Rodríguez, Rodolfo Rodríguez, and Pilar Salgado. Numerical solution 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

[304] 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

[305] 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

[306] 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

[307] 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

[308] 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

[309] 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

[310] Christine Bernardi, Edwige Godlewski, and Geneviève Raugel. A mixed method for the time-dependent Navier–Stokes problem. *IMA Journal of Numerical Analysis*, 7(2):165–189, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Bernardi:2013:PAF

[311] 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

[312] 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

[313] 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

[314] 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

[315] 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

[316] 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

[317] 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:2025:EAF

[318] Luigi C. Berselli and Alex Kaltenbach. Error analysis for a finite element approximation of the steady $p(\cdot)$-Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 45(5):3026–3076, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/5/3026/7907496`.

Berselli:2022:STD

[319] 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

[320] 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

[321] 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

[322] 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

[323] 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

[324] 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

[325] 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

[326] Alex Bespalov, Dirk Praetorius, and Michele Ruggeri. Convergence and rate optimality of adaptive multilevel 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

[327] 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

[328] 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

[329] 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

[330] 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:DGF

[331] 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

[332] 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

[333] 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.

Bessemoulin-Chatard:2025:DHN

[334] Marianne Bessemoulin-Chatard, Tino Laidin, and Thomas Rey. Discrete hypocoercivity for a nonlinear kinetic reaction model. *IMA Journal of Numerical Analysis*, 45(4):2204–2247, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/4/2204/7766077.

Betcke:2014:SDN

[335] 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

[336] 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

[337] 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

[338] 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

[339] 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

[340] 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

[341] 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.

Bialecki:2003:OSC

[342] 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

[343] 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

[344] 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/imajna/article/42/2/1454/6149431.

Binz:2022:CFE

[345] 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/imajna/article/42/3/2545/6304639.

Bir:2022:BEM

[346] 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/imajna/article/42/4/3529/6396774.

Birgin:2003:ISP

[347] 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

[348] 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

[349] 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

[350] 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

[351] 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

[352] 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

[353] Luise Blank, Harald Garcke, Lavinia Sarbu, and Vanessa Styles. Nonlocal 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

[354] 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

[355] 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

[356] 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

[357] 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

[358] 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

[359] 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

[360] 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

[361] 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

[362] 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

[363] 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

[364] 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

[365] 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

[366] 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

[367] 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`.

Bollapragada:2025:FCM

[368] Raghu Bollapragada, Tyler Chen, and Rachel Ward. On the fast convergence of minibatch heavy ball momentum. *IMA Journal of Numerical Analysis*, 45(3):1397–1424, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1397/7729526`.

Bonelle:2015:ACD

[369] 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`.

Bonetti:2025:RDG

[370] Stefano Bonetti, Michele Botti, and Paola F. Antonietti. Robust discontinuous Galerkin-based scheme for the fully-coupled nonlinear thermo-hydro-mechanical problem. *IMA Journal of Numerical Analysis*, 45(3): 1786–1820, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1786/7717776`.

Bonettini:2011:IBC

[371] 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

[372] Andrea Bonito, Vivette Girault, and Endre Süli. Finite element approximation 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

[373] Andrea Bonito, Diane Guignard, Ricardo 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

[374] 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

[375] 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 [376].

Bonito:2017:NAF

[376] 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 [375].

Bonizzoni:2014:MEM

[377] 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

[378] 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

[379] 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

[380] 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

[381] 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

[382] 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`.

Bornemann:2013:OCH

[383] Folkmar Bornemann and Georg Wechslberger. 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

[384] 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

[385] 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

[386] 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

[387] 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

[388] 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

[389] 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`.

Boubendir:2013:WNE

[390] 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

[391] 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

[392] 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

[393] 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

[394] 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

[395] 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

[396] 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`.

Boulton:2007:NVA

[397] 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

[398] 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

[399] 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 [400].

Boumal:2020:EGR

[400] 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 [399].

Boumenir:2001:CNE

[401] 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

[402] 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

[403] Benjamin Boutin, Pierre Le Barbenchon, 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 [404].

Boutin:2024:STU

[404] Benjamin Boutin, Pierre Le Barbenchon, 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 [403].

Boyaval:2022:FVA

[405] 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

[406] 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

[407] 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

[408] 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

[409] 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

[410] Abdallah Bradji and Raphaèle 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

[411] 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

[412] 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

[413] 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

[414] 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

[415] 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

[416] 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

[417] Jan Brandts and Michal Křízek. 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

[418] 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

[419] 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

[420] 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

[421] 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

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

[423] 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

[424] 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

[425] 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

[426] 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

[427] 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

[428] 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

[429] 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

[430] 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

[431] 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

[432] 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

[433] 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

[434] 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

[435] 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

[436] 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

[437] 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

[438] Andrea Bressan and Bert Jüttler. Infsup 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

[439] 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

[440] 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

[441] 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

[442] 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

[443] A. J. Briggs, J. R. Claisse, and C. M. Elliott. Finite-difference approximation 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

[444] 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

[445] 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

[446] 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

[447] 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

[448] 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

[449] 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

[450] 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

[451] 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

[452] 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

[453] 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

[454] 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

[455] 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

[456] 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

[457] 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

[458] 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

[459] 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

[460] 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`.

Brunner:2024:AFQ

[461] 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 [462].

Brunner:2024:CAF

[462] 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 [461].

Brutman:1986:GAP

[463] 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

[464] L. Brutman, P. Vértesi, 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

[465] 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

[466] 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

[467] 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

[468] 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

[469] 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

[470] 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

[471] M. D. Buhmann. Convergence of univariate quasi-interpolation using multiquadrics. *IMA Journal of Numerical Analysis*, 8(3):365–383, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Buhmann:1992:DDN

[472] 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

[473] 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:2025:PDF

[474] Martin Buhmann and Yuan Xu. Positive definite functions on a regular domain. *IMA Journal of Numerical Analysis*, 45(5):2824–2843, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/5/2824/7876385`.

Buhmann:2020:ANC

[475] 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 [476].

Buhmann:2020:EAN

[476] 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 [475].

Buhmann:2010:NRB

[477] 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

[478] 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

[479] 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

[480] 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

[481] 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

[482] 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

[483] 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

[484] 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

[485] 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:2025:SOC

[486] Erik Burman, Rebecca Durst, Miguel A Fernández, Johnny Guzmán, and Sijing Liu. A second-order correction method for loosely coupled discretizations applied to parabolic–parabolic interface problems. *IMA Journal*

of Numerical Analysis, 45(5):2628–2654, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/5/2628/7885131.

Burman:2009:WEE

[487] 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/reprint/29/2/284.

Burman:2018:RFE

[488] 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

[489] 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

[490] 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

[491] 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

[492] 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

[493] 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

[494] 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

[495] Kevin Burrage. Order properties of implicit multivalue 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

[496] Gustavo C. Buscaglia and Abdellatif 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

[497] 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

[498] 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

[499] J. C. Butcher. Optimal order and step-size sequences. *IMA Journal of Numerical Analysis*, 6(4):433–438, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Butcher:2010:TBS

[500] 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

[501] 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

[502] 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

[503] 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).

Cai:1999:APD

[504] 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

[505] 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

[506] 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.

Caloz:1997:SAR

[507] 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

[508] 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

[509] M. P. Calvo. High order starting iterates for implicit Runge–Kutta meth-

ods: 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

[510] 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

[511] 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

[512] 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

[513] 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

[514] R. F. Cameron and S. McKee. The analysis of product integration methods 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

[515] 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

[516] Clément Cancès, Claire Chainais-Hillairet, Jürgen Fuhrmann, and Benoît Gaudeul. A numerical-analysis-focused comparison of several finite volume schemes for a unipolar degener-

ate 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

[517] Clément Cancès, Virginie Ehrlacher, 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

[518] 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

[519] 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

[520] 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

[521] 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

[522] 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

[523] B. Cano and M. J. Moreta. Multistep 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

[524] 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

[525] 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

[526] 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

[527] 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

[528] X. Cao, S. F. Nemadjieu, 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

[529] 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

[530] 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

[531] 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.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

[532] 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`.

Careaga:2025:NBS

[533] Julio Careaga, Gabriel N. Gatica, Cristian Inzunza, and Ricardo Ruiz-Baier. New Banach spaces-based mixed finite element methods for the coupled poroelasticity and heat equations. *IMA Journal of Numerical Analysis*, 45(4):1936–1984, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/4/1936/7748177`.

Carlier:2025:MME

[534] Valentin Carlier, Martin Campos Pinto, and Francesco Fambri. Mass, momentum and energy preserving FEEC and broken-FEEC schemes for the incompressible Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 45(3):1868–1904, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1868/7733895`.

Carr:1995:NAM

[535] 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

[536] 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

[537] 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

[538] 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

[539] 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

[540] 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

[541] 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

[542] 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

[543] 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

[544] 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

[545] 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

[546] 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.

Carvalhaes:2013:SIN

[547] Claudio G. Carvalhaes. 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

[548] 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

[549] 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

[550] 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

[551] J. R. Cash and A. Singhal. Mono-implicit 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

[552] 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

[553] 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

[554] 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

[555] 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

[556] 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

[557] René Cautrès, Raphaèle 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

[558] 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

[559] 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

[560] 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

[561] 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

[562] 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

[563] 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

[564] 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.

Chainais-Hillairet:2007:ABF

[565] 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

[566] 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

[567] 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

[568] 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

[569] 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

[570] 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

[571] Raymond H. Chan. Toeplitz preconditioners for Toeplitz systems with nonnegative generating functions. *IMA Journal of Numerical Analysis*, 11(3): 333–345, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Chan:2001:STP

[572] Raymond H. Chan, Michael K. Ng, and Xiao-Qing Jin. Strang-type pre-

conditioners 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

[573] 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

[574] 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

[575] 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

[576] 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

[577] 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

[578] 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

[579] 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`.

Chartier:2022:DFH

[580] 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

[581] 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

[582] Jean-François Chassagneux, Junchao Chen, Noufel Frikha, and Chao Zhou. A learning scheme by sparse grids and Picard approximations for semilinear 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

[583] 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

[584] 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

[585] 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

[586] 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

[587] 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

[588] 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

[589] 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

[590] 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 [591].

Chawla:1986:CHA

[591] 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 [590].

Chegini:2012:ATP

[592] 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

[593] 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

[594] 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

[595] 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:AEE

[596] 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

[597] 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

[598] 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

[599] 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

[600] 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

[601] 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

[602] 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

[603] 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

[604] 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

[605] Jinhai Chen and Matthias Gerdts. 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

[606] 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

[607] 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

[608] Ke Chen and Martyn D. Hughes. A two-level sparse approximate in-

verse 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.

Chen:2004:SUM

[609] 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

[610] 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

[611] 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

[612] 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

[613] 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

[614] 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

[615] Xingyuan Chen and Gonçalo dos Reis. Euler simulation of interacting parti-

cle 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`.

Chen:2012:AVD

[616] 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

[617] 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

[618] 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

[619] 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

[620] 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

[621] 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

[622] Zhongwen Chen, Yu-Hong Dai, and

Tauyou 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

[623] 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

[624] 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

[625] 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

[626] 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

[627] Dennis Cheung and Felipe Cucker. Smoothed analysis of componentwise 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

[628] 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

[629] 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`.

Chin:2011:MPO

[630] Siu A. Chin and Jürgen Geiser. Multiproduct 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

[631] 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

[632] 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

[633] Franz Chouly, Mathieu Fabre, Patrick Hild, Jérôme Pousin, and Yves Renard. Residual-based a posteriori error estimation for contact problems approximated 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

[634] 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

[635] 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

[636] 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

[637] 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

[638] 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

[639] 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

[640] 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

[641] 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

[642] 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

[643] 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

[644] 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

[645] 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

[646] 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

[647] 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

[648] Ivan Cimrák. 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

[649] 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

[650] 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

[651] 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

[652] 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

[653] 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

[654] Julien Coatléven. 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

[655] 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

[656] 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

[657] 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

[658] 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

[659] 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

[660] 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

[661] 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

[662] 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

[663] 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

[664] 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

[665] 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

[666] 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, Jan-

uary 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://imajna.oxfordjournals.org/content/36/1/400.

Colbrook:2020:EUT

[667] 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

[668] 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 [669].

Coleman:1989:NMR

[669] 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 [668].

Coleman:2003:OCC

[670] 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

[671] 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

[672] 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

[673] 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:DGF

[674] Scott Congreve, Paul Houston, Endre Süli, and Thomas P. Wihler. Discon-

tinuous Galerkin finite element approximation of quasilinear elliptic boundary 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

[675] 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

[676] 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

[677] 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

[678] 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

[679] 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

[680] 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

[681] 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

[682] 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

[683] Frédéric Coquel, Marie Postel, and Quang-Huy Tran. Convergence of time-space adaptive algorithms for nonlin-

ear conservation laws. *IMA Journal 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

[684] 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

[685] 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

[686] 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

[687] 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

[688] 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

[689] 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

[690] 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

[691] 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

[692] 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

[693] Sonja Cox, Martin Hutzenthaler, 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

[694] 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

[695] 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

[696] 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

[697] 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

[698] 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

[699] 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

[700] 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

[701] Petra Csomós, Bálint Farkas, and Balázs Kovács. Error estimates for a splitting integrator for abstract semilinear 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

[702] 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

[703] 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

[704] 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

[705] 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

[706] 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

[707] 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

[708] 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

[709] 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

[710] 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

[711] 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

[712] 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

[713] 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

[714] 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

[715] 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

[716] 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

[717] 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

[718] 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

[719] 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

[720] 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

[721] 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

[722] Lourenco 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 [274].

daVeiga:2014:VEM

[723] Lourenco 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

[724] 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

[725] 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

[726] 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

[727] 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

[728] 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

[729] 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

[730] 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

[731] 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

[732] 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

[733] 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

[734] 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

[735] 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

[736] 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

[737] 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

[738] 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

[739] 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_03/240417.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240417.pdf`.

Davis:2020:NLP

[740] Damek Davis, Dmitriy Drusvyatskiy, and Courtney Paquette. The nonsmooth 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

[741] 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

[742] 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

[743] 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

[744] 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

[745] 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

[746] 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

[747] 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

[748] 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

[749] Blanca Ayuso de Dios, Ralf Hiptmair, and Cecilia Pagliantini. Auxiliary space preconditioners for SIP-DG discretizations of $H(\mathrm{curl})$-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

[750] 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

[751] 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

[752] 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

[753] 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

[754] 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

[755] 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

[756] 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

[757] 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

[758] 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

[759] 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

[760] 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

[761] 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

[762] 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

[763] 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

[764] 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

[765] Bernard Deconinck, Thomas Trogdon, 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

[766] 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

[767] 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

[768] 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

[769] 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

[770] 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

[771] 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

[772] 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

[773] 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

[774] 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

[775] 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

[776] 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

[777] Francesco Dell'Accio, Filomena Di Tommaso, and Kai Hormann. On the approximation order of triangular Shepard interpolation. *IMA Journal 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

[778] 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

[779] 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

[780] 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

[781] 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

[782] 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

[783] 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

[784] 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

[785] 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

[786] 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

[787] Denis Devaud. Petrov–Galerkin space–time *hp*-approximation of parabolic equations in $\mathrm{H}^{1/2}$. *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

[788] 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

[789] 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

[790] 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

[791] 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 IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/44/3/1699/7249211.

DiPietro:2017:AOM

[792] 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 IJNADH. 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

[793] 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

[794] 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

[795] Lars Diening, Dietmar Kröner, Michael Ruzicka, and Ioannis Toulopoulos. 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

[796] 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

[797] 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

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

Diethelm:1997:GCQ

[799] 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

[800] 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

[801] 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

[802] 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

[803] 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

[804] 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

[805] 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

[806] 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

[807] 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).

Djukic:2025:EBG

[808] Rada M. Mutavdzić Djukić. The error bounds of Gaussian quadratures for one rational modification of Chebyshev measures. *IMA Journal of Numerical Analysis*, 45(3):1537–1557, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/3/1537/7709445.

Dobson:2014:TNP

[809] 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

[810] 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

[811] Christian Döding 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

[812] 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

[813] 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

[814] Sergey Dolgov and Tomás 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

[815] V. Domínguez, I. G. Graham, and V. P. Smyshlyaev. Stability and error estimates for Filon–Clenshaw–Curtis rules for highly oscillatory integrals. *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`.

Dominguez:2025:SEN

[816] Víctor Domínguez and Catalin Turc. Stability estimates of Nyström discretizations of Helmholtz decomposition boundary integral equation formulations for the solution of Navier scattering problems in two dimensions with Dirichlet boundary conditions. *IMA Journal of Numerical Analysis*, 45(5):2880–2920, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/5/2880/7887668`.

Dominicus:2025:CAI

[817] Alexander Dominicus, Fernando D Gaspoz, and Christian Kreuzer. Convergence of an adaptive C^0-interior penalty Galerkin method for the biharmonic problem. *IMA Journal of Numerical Analysis*, 45(5):2685–2722, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/5/2685/7819326`.

Dond:2017:CAL

[818] 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

[819] 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

[820] 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:2025:EHO

[821] Z. Dong and L. Mascotto. *hp*-optimal convergence of the original DG method for linear hyperbolic problems on special simplicial meshes. *IMA Journal of Numerical Analysis*, 45(3):1372–1396, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1372/7746421`.

Dong:2024:HHO

[822] Zhaonan Dong and Alexandre Ern. C^0-hybrid high-order methods for biharmonic 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

[823] 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

[824] 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

[825] 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

[826] 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

[827] 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

[828] 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 [829].

Dormand:1991:CHO

[829] 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 IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See [828].

Dormand:1985:GEE

[830] 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

[831] Gonçalo dos Reis, Stefan Engelhardt, and Greig Smith. Simulation of McKean–Vlasov SDEs with superlinear 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

[832] 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

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

Dougalis:2022:HOF

[834] 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

[835] 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

[836] 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

[837] 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

[838] 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

[839] Jérôme Droniou, Beniamin 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

[840] 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

[841] 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

[842] 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

[843] 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

[844] 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

[845] 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

[846] 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

[847] 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

[848] 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

[849] 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

[850] 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

[851] 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

[852] 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

[853] 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

[854] 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

[855] 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

[856] 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

[857] 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

[858] 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

[859] 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

[860] 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`.

Duncan:1991:SES

[861] 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

[862] 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

[863] 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

[864] 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

[865] 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

[866] 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

[867] 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.

Duran:2012:SFE

[868] 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

[869] 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

[870] 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

[871] 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

[872] 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

[873] 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

[874] 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

[875] G. Dziuk and C. M. Elliott. Finite elements on evolving surfaces. *IMA Journal 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

[876] 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

[877] 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

[878] 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

[879] 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`.

Edelmann:2025:NAE

[880] Dominik Edelmann, Balázs Kovács, and Christian Lubich. Numerical analysis of an evolving bulk-surface model of tumour growth. *IMA Journal of Numerical Analysis*, 45(5):2581–2627, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/5/2581/7824083`.

Effland:2022:CCA

[881] 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

[882] 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 [883].

Egger:2025:CAP

[883] 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`. See [882].

Egger:2010:HMD

[884] 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

[885] 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`.

Egloffe:2015:RWR

[886] A.-C. Egloffe, 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`.

Ehrhardt:2025:GIA

[887] Matthias J. Ehrhardt, Erlend S. Riis, Torbjørn Ringholm, and Carola-Bibiane Schönlieb. A geometric integration approach to smooth optimization: foundations of the discrete gradient method. *IMA Journal of Numerical Analysis*, 45(3):1269–1299, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1269/7701998`.

Eibner:2006:LEA

[888] T. Eibner and J. M. Melenk. 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`.

Eigel:2010:MFP

[889] 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`.

Eigel:2018:PEC

[890] 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`.

Eikeland:2021:AEC

[891] 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`.

Eisenmann:2022:VAS

[892] 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.

ElAlaoui:2007:PPA

[893] 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.

El-Gebeily:1998:FDM

[894] 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.

ElTarazi:1985:EIM

[895] 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 [896].

ElTarazi:1985:IMS

[896] 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 [895].

ElTarazi:1986:MPA

[897] 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

[898] 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

[899] S. W. Ellacott. On the convergence of some approximate methods of conformal mappings. *IMA Journal of Numerical Analysis*, 1(2):185–192, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Ellacott:1983:CFE

[900] 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

[901] 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

[902] 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

[903] 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

[904] C. M. Elliott, D. Kay, and V. Styles. Finite element analysis of a current density–electric field formulation 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; http://imanum.oupjournals.org/cgi/reprint/25/1/182`.

Elliott:2021:UTC

[905] 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

[906] C. M. Elliott and S. A. Smitheman. 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

[907] Charles M. Elliott. On the finite element approximation of an elliptic variational inequality arising from an implicit time discretization of the Stefan problem. *IMA Journal of Numerical Analysis*, 1(1):115–125, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Elliott:2017:ACS

[908] 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

[909] 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

[910] 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

[911] 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

[912] 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

[913] 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

[914] 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

[915] 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

[916] 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

[917] 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

[918] Clemens Elster and Arnold Neumaier. A grid algorithm for bound constrained 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

[919] 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

[920] 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

[921] 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.

Erb:2020:SIS

[922] 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

[923] 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

[924] 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 $H(\mathrm{div})$. *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

[925] 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

[926] 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

[927] 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

[928] 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

[929] 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

[930] 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

[931] 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

[932] 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

[933] 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

[934] 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

[935] 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 IJNADH. 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

[936] R. Eymard, T. Gallouët, and R. Herbin. A cell-centred finite-volume approximation for anisotropic diffusion op-

erators 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

[937] 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

[938] 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

[939] 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

[940] 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

[941] 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

[942] 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

[943] 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 Anal-*

ysis, 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

[944] 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

[945] 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

[946] 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

[947] 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

[948] 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

[949] 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

[950] 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

[951] 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

[952] 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

[953] 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

[954] 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

[955] 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:2025:DMM

[956] István Faragó, Róbert Horváth, and János Karátson. Discrete maximum-minimum principle for a linearly implicit scheme for nonlinear parabolic FEM problems under weakened time restrictions. *IMA Journal of Numerical Analysis*, 45(5):2756–2790, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/5/2756/7781990.

Farago:2012:DMP

[957] 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

[958] 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

[959] 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

[960] 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

[961] C. L. Farmer. A moving point method for arbitrary Peclet number multidimensional 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

[962] 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

[963] 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

[964] 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

[965] 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

[966] 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

[967] Paul A. Farrell. Sufficient conditions for uniform convergence of a class of difference schemes for a singularly perturbed problem. *IMA Journal of Numerical Analysis*, 7(4):459–472, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fasi:2022:DIS

[968] 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

[969] 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

[970] 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

[971] Markus Faustmann, Jens Markus Melenk, and Dirk Praetorius. Existence of $\mathcal{H}$-matrix approximants to the inverse of BEM matrices: the hypersingular 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

[972] 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

[973] 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

[974] Eduard Feireisl, Trygve Karper, and Antonín Novotný. A convergent numerical 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

[975] 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

[976] 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

[977] 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

[978] 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:2025:FOP

[979] Bo Feng and Gang Wu. First-order perturbation theory of trust-region subproblem. *IMA Journal of Numerical Analysis*, 45(3):1614–1647, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/3/1614/7708719.

Feng:1998:ADD

[980] 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

[981] 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

[982] 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

[983] Xiaobing Feng, Akash Ashirbad Panda, and Andreas Prohl. Higher order time discretization for the stochastic semilinear 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

[984] 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

[985] 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

[986] 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

[987] 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

[988] Miguel A. Fernández and Jimmy Mullaert. 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

[989] Orizon P. Ferreira. Local convergence of Newton's method in Banach 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

[990] 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

[991] 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

[992] 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 Journal of Numerical Analysis*, 5(1):79–100, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fletcher:1985:EC

[993] 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

[994] 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

[995] 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

[996] 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

[997] 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

[998] 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

[999] 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

[1000] 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

[1001] 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

[1002] 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

[1003] 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

[1004] 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

[1005] 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

[1006] 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

[1007] 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

[1008] 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

[1009] 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

[1010] 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

[1011] 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

[1012] 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

[1013] 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

[1014] 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

[1015] 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

[1016] 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

[1017] 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

[1018] 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

[1019] 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

[1020] 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

[1021] H. Fritz. Isoparametric finite element approximation of Ricci curvature. *IMA Journal of Numer-*

ical 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

[1022] 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

[1023] 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

[1024] 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

[1025] 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

[1026] 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

[1027] 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

[1028] 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

[1029] 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`.

Fulton:2014:ESD

[1030] 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

[1031] 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

[1032] 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

[1033] 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

[1034] 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

[1035] 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

[1036] 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`.

Gallistl:2025:MFE

[1037] Dietmar Gallistl, Moritz Hauck, Yizhou Liang, and Daniel Peterseim. Mixed finite elements for the Gross–Pitaevskii eigenvalue problem: *a priori* error analysis and guaranteed lower energy bound. *IMA Journal of Numerical Analysis*, 45(3):1320–1346, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1320/7734637`.

Gallistl:2025:CFE

[1038] Dietmar Gallistl and Shudan Tian. Continuous finite elements satisfying a strong discrete Miranda–Talenti identity. *IMA Journal of Numerical Analysis*, 45(3):1347–1371, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1347/7746422`.

Gallouet:2016:EEN

[1039] Thierry Gallouët, Raphaèle 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

[1040] 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

[1041] 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

[1042] 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

[1043] 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

[1044] Gregor Gantner, Alexander Haberl, Dirk Praetorius, and Bernhard Stiftner. 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

[1045] 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

[1046] 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

[1047] 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

[1048] 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

[1049] 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

[1050] 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

[1051] 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

[1052] 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

[1053] 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

[1054] 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

[1055] 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

[1056] 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

[1057] 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

[1058] 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

[1059] 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

[1060] 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

[1061] 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

[1062] 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

[1063] 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

[1064] 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

[1065] 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

[1066] 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

[1067] Laura Gastaldo, Raphaèle 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

[1068] 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

[1069] 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

[1070] 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

[1071] 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

[1072] 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

[1073] 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

[1074] 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

[1075] I. P. Gavrilyuk, A. V. Klimenko, V. L. Makarov, and N. O. Rossokhata. Exponentially convergent parallel algorithm for nonlinear eigenvalue problems. *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

[1076] 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

[1077] 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

[1078] 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/reprint/25/3/473`.

Georgoulis:2019:PEB

[1079] 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

[1080] 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

[1081] 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

[1082] 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

[1083] 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

[1084] 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

[1085] 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.

Gerencser:2025:MSS

[1086] Máté Gerencsér, Gerald Lampl, and Chengcheng Ling. The Milstein scheme for singular SDEs with Hölder continuous drift. *IMA Journal of Numerical Analysis*, 45(5):3077–3108, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/5/3077/7923219.

Gerisch:2010:AEE

[1087] 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.

Gerrard:1984:APC

[1088] 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).

Gervais:2002:NSC

[1089] 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

[1090] 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

[1091] 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.

Giammatteo:2025:EAC

[1092] Elena Giammatteo, Alexander Heinlein, and Matthias Schlottbom. An

extension of the approximate component mode synthesis method to the heterogeneous Helmholtz equation. *IMA Journal of Numerical Analysis*, 45(5): 2844–2879, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/5/2844/7841860`.

Gibbs:2021:HFB

[1093] 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`.

Giesselmann:2015:LMA

[1094] 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:2025:EPE

[1095] Jan Giesselmann and Niklas Kolbe. A posteriori error analysis of a positivity preserving scheme for the power-law diffusion Keller–Segel model. *IMA Journal of Numerical Analysis*, 45(5): 2791–2823, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/5/2791/7841859`.

Giesselmann:2016:RRE

[1096] 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

[1097] 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

[1098] 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

[1099] 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

[1100] 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

[1101] 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

[1102] 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

[1103] 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

[1104] 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

[1105] 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.

Girault:1996:FEE

[1106] 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

[1107] 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`.

Gittelson:2012:RGF

[1108] Claude Jeffrey Gittelson. 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

[1109] 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

[1110] 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).

Glatt-Holtz:2025:LTA

[1111] Nathan E. Glatt-Holtz and Cecilia F. Mondaini. Long-term accuracy of numerical approximations of SPDEs with the stochastic Navier–Stokes equations as a paradigm. *IMA Journal of Numerical Analysis*, 45(3):1648–1742, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1648/7713728`.

Glaubitz:2023:CAP

[1112] 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

[1113] 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

[1114] 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

[1115] 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

[1116] 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

[1117] 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

[1118] 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`.

Goldys:2025:NME

[1119] Beniamin Goldys, Chunxi Jiao, and Kim-Ngan Le. Numerical method and error estimate for stochastic Landau–Lifshitz–Bloch equation. *IMA Journal of Numerical Analysis*, 45(3): 1821–1867, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1821/7731237`.

Golub:2009:QAY

[1120] 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`.

Gomes:2023:MML

[1121] 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`.

Gomez:2025:CST

[1122] Dolores Gómez, Bibiana López-Rodríguez, Pilar Salgado, and Pablo

Venegas. A coupled steady thermo-electromagnetic problem in axisymmetric geometries. Mathematical and numerical analysis. *IMA Journal of Numerical Analysis*, 45(4):2132–2170, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/4/2132/7759640`.

Gong:2021:DDP

[1123] 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`.

Gong:2020:IEE

[1124] 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`.

Gong:2024:CEF

[1125] Wei Gong, Buyang Li, and Qiqi Rao. Convergent evolving finite element 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`.

Gong:2019:CAF

[1126] 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 [1127].

Gong:2020:CCA

[1127] 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 [1126].

Gonon:2022:UEE

[1128] 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

[1129] 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

[1130] 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

[1131] 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

[1132] 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

[1133] 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

[1134] 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

[1135] 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

[1136] 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

[1137] 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

[1138] 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`.

Gould:1986:ADS

[1139] 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

[1140] 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

[1141] 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

[1142] 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

[1143] 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

[1144] 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

[1145] 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

[1146] 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

[1147] 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

[1148] 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

[1149] 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

[1150] 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

[1151] 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). URL http://academic.oup.com/imajna/article/39/2/626/4788734.

Graser:2013:TDA

[1152] 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

[1153] 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

[1154] 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

[1155] 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

[1156] Serge Gratton, Sadok Jerad, and Philippe L. Toint. Yet another fast variant of Newton's method for nonconvex 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

[1157] 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

[1158] 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

[1159] 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

[1160] 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

[1161] 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

[1162] 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

[1163] 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

[1164] 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

[1165] 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

[1166] 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

[1167] 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

[1168] Peter Grindrod, Desmond J. Higham, and Gabriela Kalna. Periodic reordering. *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

[1169] P. Grohs and S. Hosseini. Nonsmooth 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

[1170] 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

[1171] 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

[1172] Ch. Grossmann and H.-G. Roos. Feedback 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

[1173] 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

[1174] 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, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://imajna.oxfordjournals.org/content/36/4/1783.

Grune:2001:PAO

[1175] 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

[1176] 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

[1177] 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

[1178] 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

[1179] 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

[1180] 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

[1181] J.-L. Guermond. Subgrid stabilization of Galerkin approximations of linear monotone operators. *IMA Journal of Numerical Analysis*, 21(1):165–197, January 2001. CODEN IJNADH. 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

[1182] 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

[1183] 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

[1184] 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

[1185] 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

[1186] 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

[1187] 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

[1188] F. Guillén-González and M. V. Redondo-Neble. New error estimates 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

[1189] 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

[1190] 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

[1191] 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

[1192] 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

[1193] 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

[1194] 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

[1195] 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

[1196] 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 IJ-

NADH. 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

[1197] 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

[1198] 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

[1199] Martin H. Gutknecht and Beresford N. Parlett. From qd to LR, or, how were the qd and LR algorithms 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

[1200] 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

[1201] 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

[1202] 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

[1203] Johnny Guzmán, Chi-Wang Shu, and Filánder A. Sequeira. $H(\mathrm{div})$ 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

[1204] Piotr Gwiazda, Błazej 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

[1205] 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

[1206] W. Hackbusch. Convolution of *hp* functions on locally refined grids. *IMA Journal of Numerical Analysis*, 29(4):960–985, October 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

[1207] 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

[1208] 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

[1209] 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

[1210] 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

[1211] 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

[1212] 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

[1213] 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

[1214] 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

[1215] 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:2025:SCM

[1216] Nicholas Hale. A spectral collocation method for functional and delay differential equations. *IMA Journal of Numerical Analysis*, 45(5):2921–2947, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/5/2921/7912355.

Hale:2016:FFB

[1217] 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

[1218] 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

[1219] 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

[1220] 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

[1221] 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

[1222] 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

[1223] 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

[1224] 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

[1225] 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

[1226] Weimin Han, Min Ling, and Fei Wang. Numerical solution of an $H(\mathrm{curl})$-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

[1227] Yongbin Han and Yanren Hou. Semirobust analysis of an $H(\mathrm{div})$-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

[1228] 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

[1229] 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

[1230] 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

[1231] Eskil Hansen and Erik Henningsson. 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

[1232] Eskil Hansen and Alexander Ostermann. Dimension splitting for quasilinear 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

[1233] 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

[1234] 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/reprint/29/2/257.

Haque:1987:CSO

[1235] 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).

Harder:2022:EEC

[1236] 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.

Hardering:2023:TET

[1237] 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.

Hardering:2025:PFE

[1238] Hanne Hardering and Simon Praetorius. Parametric finite-element discretization of the surface Stokes equations: inf-sup stability and discretization error analysis. *IMA Journal of Numerical Analysis*, 45(5):2948–2987, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/5/2948/7931311.

Hardering:2022:QCC

[1239] 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.

Hare:2022:EBO

[1240] 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.

Hare:2024:MAA

[1241] 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.

Harrach:2023:RLI

[1242] Bastian Harrach, Tim Jahn, and Roland Potthast. Regularizing lin-

ear 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`.

Haut:2016:HOT

[1243] T. S. Haut, T. Babb, P. G. Martinsson, 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

[1244] 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

[1245] 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

[1246] 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

[1247] 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

[1248] 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

[1249] Behrend Heeren, Martin Rumpf, and Benedikt Wirth. Variational time dis-

cretization 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

[1250] 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 IJNADH. 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

[1251] 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

[1252] 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

[1253] 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://comjnl.oxfordjournals.org/cgi/reprint/26/3/541.

Hell:2015:MDS

[1254] 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

[1255] 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

[1256] 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

[1257] 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 [1258].

Henke:2015:EPB

[1258] 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 [1257].

Herbin:2023:CQS

[1259] Raphaèle Herbin, Jean-Claude Latché, Youssouf Nasseri, 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

[1260] 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

[1261] 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

[1262] 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

[1263] 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

[1264] 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

[1265] 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

[1266] 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

[1267] 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 $\Re$. *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`.

Hewett:2015:FIB

[1268] 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

[1269] 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

[1270] 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

[1271] 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.oxfordjournals.org/cgi/content/abstract/25/3/443`; `http://imanum.oxfordjournals.org/cgi/reprint/25/3/443`.

Higham:1988:FSV

[1272] 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).

Higham:1997:IRL

[1273] 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.

Higham:2002:CNC

[1274] 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`.

Higham:2004:NSB

[1275] 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`.

Higham:2000:NAQ

[1276] 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`.

Higham:2022:SBL

[1277] 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.

Hill:1996:SCD

[1278] 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_02/160289.sgm.abs.html.

Hill:2005:MAL

[1279] 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

[1280] 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

[1281] 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

[1282] M. G. Hill and D. Porter. The numerical determination of fundamental solutions 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

[1283] 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

[1284] 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

[1285] 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

[1286] 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

[1287] 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

[1288] 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

[1289] 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

[1290] 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

[1291] 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

[1292] 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

[1293] H. Holden, K. H. Karlsen, and N. H. Risebro. A convergent finite-difference method for a nonlinear variational 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.

Holden:2015:CFD

[1294] 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.

Hong:2021:ORC

[1295] 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.

Hong:2025:CAM

[1296] Jialin Hong, Diancong Jin, and Derui Sheng. Convergence analysis for minimum action methods coupled with a finite difference method. *IMA Journal of Numerical Analysis*, 45 (3):1501–1536, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/3/1501/7696953.

Hong:2023:SSI

[1297] 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.

Hopkins:1989:NEC

[1298] 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).

Hoppe:1993:GCM

[1299] 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).

Hosea:1993:GEI

[1300] 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).

Hosek:2019:CNM

[1301] 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`.

Houbak:1985:DRT

[1302] 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

[1303] 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

[1304] 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

[1305] Paul Houston, Janice Robson, and Endre Süli. Discontinuous Galerkin finite element approximation of quasilinear 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

[1306] 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

[1307] Paul Houston and Thomas P. Wihler. Second-order elliptic PDEs with discontinuous boundary data. *IMA Jour-*

nal 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

[1308] 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

[1309] 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

[1310] 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

[1311] 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

[1312] 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

[1313] 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

[1314] 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

[1315] 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

[1316] 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

[1317] 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

[1318] 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/imajna/article/44/6/3717/7490879`.

Hu:1993:ADR

[1319] Yingkang 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

[1320] 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

[1321] 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

[1322] 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/imajna/article/40/2/1217/5316762.

Huang:2017:SGM

[1323] 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.

Huang:2000:DRK

[1324] 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.

Huang:2009:SAG

[1325] 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.

Huang:1999:CAI

[1326] 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.

Huang:2002:MEM

[1327] 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.

Huang:2025:HOE

[1328] Jizu Huang. High-order energy stable discrete variational derivative

schemes for gradient flows. *IMA Journal of Numerical Analysis*, 45 (4):2329–2360, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/4/2329/7760134.

Huang:1993:NPM

[1329] 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).

Huang:2012:APM

[1330] 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.

Huang:2005:GLL

[1331] Zheng-Hai Huang. The global linear and local quadratic convergence of a non-interior continuation algorithm for the LCP. *IMA Journal 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

[1332] 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

[1333] 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).

Hundsdorfer:1994:EGL

[1334] Willem Hundsdorfer. 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).

Hundsdorfer:2004:NFL

[1335] Willem Hundsdorfer 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

[1336] Svenja Hüning and Johannes Wallner. Convergence analysis of subdi-

vision 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

[1337] 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

[1338] 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

[1339] 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

[1340] 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

[1341] 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

[1342] 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

[1343] Noureddine 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

[1344] 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

[1345] 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

[1346] 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

[1347] 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.

Imbert-Gerard:2025:TTQ

[1348] Lise-Marie Imbert-Gérard and Guillaume Sylvand. Three types of quasi-Trefftz functions for the 3D convected Helmholtz equation: construction and approximation properties. *IMA Journal of Numerical Analysis*, 45(4):2274–2328, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/4/2274/7816731.

intHout:1997:SAR

[1349] 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

[1350] 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

[1351] 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

[1352] 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

[1353] 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

[1354] 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

[1355] 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

[1356] 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

[1357] 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

[1358] 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

[1359] 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

[1360] 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

[1361] 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

[1362] 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

[1363] 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

[1364] 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

[1365] 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

[1366] 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

[1367] 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.

Iserles:2008:D

[1368] 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

[1369] 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.

Istratuca:2025:SCE

[1370] Anastasia Istratuca and Aretha L. Teckentrup. Smoothed circulant embedding with applications to multilevel Monte Carlo methods for PDEs with random coefficients. *IMA Journal of Numerical Analysis*, 45(5):3138–3178, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/5/3138/8029977.

Jackiewicz:1987:SAM

[1371] 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

[1372] 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

[1373] 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

[1374] 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

[1375] 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

[1376] 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

[1377] 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

[1378] 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

[1379] 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.

Jaroszkowski:2024:FEA

[1380] Bartosz Jaroszkowski 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

[1381] 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

[1382] 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

[1383] 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

[1384] 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`.

Jennings:1982:BSV

[1385] 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

[1386] 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

[1387] Max Jensen. $L^2(H^1_\gamma)$ 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

[1388] 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

[1389] 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

[1390] 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

[1391] 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

[1392] Carlos Jerez-Hanckes and José Pinto. Spectral Galerkin method for solving Helmholtz boundary integral equations on smooth screens. *IMA Journal 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

[1393] 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`.

Ji:2025:MIF

[1394] Haifeng Ji, Dong Liang, and Qian Zhang. A mini immersed finite element method for two-phase Stokes problems on Cartesian meshes. *IMA Journal of Numerical Analysis*, 45 (4):1985–2022, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/4/1985/7753455`.

Ji:2025:LRE

[1395] Lun Ji, Alexander Ostermann, Frédéric Rousset, and Katharina Schratz. Low regularity error estimates for the time integration of 2D NLS. *IMA Journal of Numerical Analysis*, 45(4): 2023–2059, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/4/2023/7755715`.

Jiang:2022:AEF

[1396] Xue Jiang, Peijun Li, Junliang Lv, Zhoufeng Wang, Haijun Wu, and Weiying 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

[1397] 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

[1398] 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

[1399] 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

[1400] 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

[1401] 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

[1402] 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

[1403] 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

[1404] 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

[1405] Bangti Jin, Yubo Zhao, and Jun Zou. Iterative parameter choice by discrepancy 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

[1406] 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

[1407] 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

[1408] 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

[1409] 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

[1410] 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

[1411] 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

[1412] 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

[1413] 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

[1414] 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

[1415] 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

[1416] Giselle Sosa Jones, Loïc Cappanera, 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

[1417] 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

[1418] 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

[1419] 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

[1420] 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 IJNADH. 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

[1421] 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

[1422] 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

[1423] 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 IJNADH. 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

[1424] 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 IJNADH. 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

[1425] 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

[1426] 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 IJNADH. 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

[1427] P. D. Kaklis and D. G. Pandelis. 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

[1428] Barbara Kaltenbacher. Convergence guarantees for coefficient reconstruction in PDEs from boundary measurements 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`.

Kaltenbacher:2025:CRU

[1429] Barbara Kaltenbacher. Convergence rates under a range invariance condition with application to electrical impedance tomography. *IMA Journal of Numerical Analysis*, 45 (4):1905–1935, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/4/1905/7781989`.

Kaltenbacher:2015:ETI

[1430] Barbara Kaltenbacher, Vanja Nikolic, and Mechthild Thalhammer. Efficient time integration methods based on operator splitting and application to the Westervelt equation. *IMA Journal 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`.

Kammonen:2023:SGE

[1431] Aku Kammonen, Jonas Kiessling, Petr Plecháč, Mattias Sandberg, Anders Szepessy, and Raul Tempone. Smaller generalization error derived for a deep residual neural network compared 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`.

Kang:2022:GFE

[1432] Wenyan Kang, Bernard A. Egwu, Yubin Yan, and Amiya K. Pani. Galerkin finite element approximation of a stochastic semilinear fractional subdiffusion with fractionally integrated additive 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`.

Kangal:2020:ENA

[1433] Fatih Kangal and Emre Mengi. Erratum 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`. See [1434].

Kangal:2020:NAM

[1434] Fatih Kangal and Emre Mengi. Nonsmooth 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. See erratum [1433].

Kaps:1989:RMU

[1435] 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

[1436] 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

[1437] 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

[1438] 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

[1439] 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

[1440] 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

[1441] 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

[1442] 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

[1443] 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

[1444] 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

[1445] 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

[1446] 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

[1447] 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

[1448] Kenneth Hvistendahl 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.

Kashiwabara:2025:FEA

[1449] Takahito Kashiwabara. Finite element analysis of a generalized Robin bound-

ary value problem in curved domains based on the extension approach. *IMA Journal of Numerical Analysis*, 45(5): 2723–2755, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/5/2723/7823040.

Kawohl:1998:CFE

[1450] 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.

Kay:2001:RLE

[1451] 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.

Kazashi:2019:QMC

[1452] 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.

Kelly:2018:ATS

[1453] 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.

Kessler:2002:PEE

[1454] 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.

Ketcheson:2015:ASR

[1455] 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.

Khalifa:1982:CQC

[1456] 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).

Khan:2021:RPE

[1457] 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`.

Khor:1990:FRM

[1458] 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).

Khristenko:2023:STF

[1459] 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`.

King:1986:NDF

[1460] J. Thomas King and Diego A. Murio. 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).

Kirk:2024:NAH

[1461] 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`.

Kirsch:1990:CAC

[1462] 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

[1463] 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

[1464] 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

[1465] 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

[1466] 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.

Klioba:2025:PUC

[1467] Katharina Klioba and Mark Veraar. Pathwise uniform convergence of time discretization schemes for SPDEs. *IMA Journal of Numerical Analysis*, 45 (4):2060–2131, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/4/2060/7823734.

Kloeden:2009:ASV

[1468] 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

[1469] 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

[1470] 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

[1471] 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

[1472] 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

[1473] 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

[1474] 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

[1475] 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

[1476] 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

[1477] 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

[1478] 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

[1479] 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

[1480] 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

[1481] 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

[1482] 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

[1483] 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

[1484] 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

[1485] 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

[1486] 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

[1487] 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

[1488] Michael Kraus and Tomasz M. Tyranowski. 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

[1489] 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

[1490] 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

[1491] Fritz Kretzschmar, Andrea Moiola, Ilaria Perugia, and Sascha M. Schnepp. 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

[1492] 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

[1493] 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

[1494] 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

[1495] David Krieg and Mathias Sonnleitner. 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

[1496] 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.

Krumbiegel:2025:HOM

[1497] Felix Krumbiegel and Roland Maier. A higher order multiscale method for the wave equation. *IMA Journal of Numerical Analysis*, 45(4):2248–2273, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/4/2248/7759638.

Kruse:2014:OEE

[1498] 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

[1499] Jaeun 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

[1500] 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

[1501] 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

[1502] 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

[1503] 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

[1504] 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

[1505] Rekha P. Kulkarni. Use of extrapolation for improving the order of convergence of eigenelement 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

[1506] 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

[1507] 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

[1508] 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

[1509] 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

[1510] 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

[1511] 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

[1512] 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

[1513] 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`.

Kwon:2022:CCE

[1514] 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`.

Kyoya:2020:CCM

[1515] 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

[1516] 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`.

Kyza:2011:ECT

[1517] 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`.

Lai:2002:FSD

[1518] 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`.

Lakkis:2022:LSG

[1519] 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

[1520] 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

[1521] 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

[1522] 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

[1523] 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

[1524] 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

[1525] 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

[1526] 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

[1527] 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

[1528] 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

[1529] 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

[1530] 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

[1531] 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

[1532] 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

[1533] 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

[1534] 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

[1535] Philip L. Lederer and Joachim Schöberl. Polynomial robust stability analysis for $H(\mathrm{div})$-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`.

Ledoux:2010:ENS

[1536] 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`.

Lee:2012:STA

[1537] 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`.

Lee:2025:LCA

[1538] Young-Ju Lee and Jongho Park. On the linear convergence of additive Schwarz methods for the p-Laplacian. *IMA Journal of Numerical Analysis*, 45(5):2655–2684, September 2025. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/5/2655/7789871.

Lehmann:1986:CEB

[1539] 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).

Lehrenfeld:2018:AHO

[1540] 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.

Leimkuhler:2016:CAE

[1541] 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.

Leitao:2021:RRC

[1542] 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.

Lelievre:2023:MPM

[1543] 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. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/43/2/737/6549751.

Lemaire:2021:BHH

[1544] 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

[1545] 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

[1546] 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

[1547] 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

[1548] 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

[1549] 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

[1550] 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

[1551] 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

[1552] 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

[1553] 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

[1554] 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

[1555] 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

[1556] 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

[1557] 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

[1558] 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

[1559] 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:2006:NMR

[1560] 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

[1561] 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

[1562] 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`.

Li:2023:FEM

[1563] 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

[1564] 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

[1565] 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

[1566] 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

[1567] 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

[1568] 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

[1569] 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

[1570] 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

[1571] 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

[1572] 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

[1573] Wenbo Li and Ricardo H. Nochetto. Quantitative stability and error estimates 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

[1574] 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

[1575] 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

[1576] 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

[1577] 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 [1578].

Li:2019:ENA

[1578] 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 [1577].

Li:2012:GQA

[1579] 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

[1580] Xu Li and Hongxing Rui. A low-order divergence-free h(div)-conforming finite 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

[1581] 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

[1582] 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

[1583] 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

[1584] 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

[1585] 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

[1586] 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

[1587] 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

[1588] 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

[1589] Qigang Liang, Xuejun Xu, and Shangyou Zhang. On a sharp estimate of overlapping Schwarz methods in $H(\mathrm{curl};\Omega)$ and $H(\mathrm{div};\Omega)$. *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

[1590] 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 Analysis*, 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

[1591] 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 [1524].

Liesen:2016:PNI

[1592] 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

[1593] 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

[1594] 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

[1595] 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

[1596] 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 (elec-

tronic). URL http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/215; http://imajna.oxfordjournals.org/cgi/reprint/28/2/215.

Liao:2022:ABI

[1597] 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

[1598] 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.

Liao:2025:ACE

[1599] Hong lin Liao, Nan Liu, and Xuan Zhao. Asymptotically compatible energy of variable-step fractional BDF2 scheme for the time-fractional Cahn–Hilliard model. *IMA Journal of Numerical Analysis*, 45(3):1425–1454, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/3/1425/7698156.

Lindner:2021:SCH

[1600] 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

[1601] 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

[1602] 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

[1603] Torsten Linß. On the numerical solution of involutive ordinary dif-

ferential 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

[1604] 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

[1605] 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

[1606] 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

[1607] 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

[1608] 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

[1609] 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

[1610] 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

[1611] Hongyu Liu and Kai Zhang. Multisymplectic 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

[1612] 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

[1613] 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

[1614] 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

[1615] 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 IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Liu:2020:EPM

[1616] 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

[1617] Xiaowei Liu, Martin Stynes, and Jin Zhang. Supercloseness of edge stabi-

lization 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

[1618] 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

[1619] 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

[1620] 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

[1621] 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

[1622] 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

[1623] Maria Lopez-Fernandez and Stefan Sauter. Generalized convolution quadrature with variable time stepping. *IMA Journal of Numerical 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

[1624] 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

[1625] 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

[1626] 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

[1627] 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

[1628] Gabriel J. Lord and Jacques Rougemont. 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

[1629] 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

[1630] 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

[1631] 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

[1632] 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

[1633] 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

[1634] 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

[1635] 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

[1636] 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

[1637] 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

[1638] 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

[1639] 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

[1640] 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

[1641] 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

[1642] 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.

Lukacova-Medvidova:2025:CEE

[1643] 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

[1644] 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

[1645] 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

[1646] 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

[1647] 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

[1648] 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

[1649] 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

[1650] 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

[1651] 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

[1652] 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

[1653] 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

[1654] 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

[1655] J. A. Mackenzie and W. R. Mekwi. An analysis of stability and conver-

gence 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

[1656] 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

[1657] 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

[1658] 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

[1659] 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

[1660] 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

[1661] 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

[1662] 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

[1663] 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/43/6/3169/6795915.

Maire:2006:MCM

[1664] 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:DGF

[1665] 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

[1666] 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

[1667] 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

[1668] 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

[1669] 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 [1670].

Makroglou:1983:EHM

[1670] 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 [1669].

Malajovich:2023:CSP

[1671] 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

[1672] 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

[1673] T. Malkmus, M. Ruzicka, S. Eckstein, and I. Toulopoulos. 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

[1674] 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

[1675] 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/imajna/article/41/2/1441/5837336`.

Manneback:1985:MAG

[1676] 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

[1677] 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/imajna/article/43/1/414/6503972`.

Manni:1997:MIO

[1678] 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

[1679] 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

[1680] 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

[1681] 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

[1682] 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

[1683] 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

[1684] 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

[1685] 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

[1686] 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

[1687] 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

[1688] 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

[1689] 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

[1690] 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

[1691] 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

[1692] 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

[1693] 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

[1694] 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

[1695] 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

[1696] 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

[1697] 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

[1698] Giuseppe Mastroianni and Gradimir V. Milovanovic. Some numerical methods for second-kind Fredholm integral equations on the real semiaxis. *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

[1699] Giuseppe Mastroianni, Incoronata Notarangelo, and Gradimir V. Milovanović. Gaussian quadrature rules with an exponential weight on the real semiaxis. *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/content/34/4/1654`.

Mastronardi:2015:SBS

[1700] 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

[1701] 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

[1702] 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

[1703] 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`.

Mattar:2023:PTM

[1704] 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

[1705] 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

[1706] 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

[1707] 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

[1708] 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

[1709] Sean McKee, Tao Tang, and Teresa Diogo. An Euler-type method for two-dimensional Volterra integral equa-

tions 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

[1710] 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

[1711] 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:AEE

[1712] 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

[1713] 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

[1714] 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

[1715] 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.

McLeod:1982:GDD

[1716] 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).

Meddahi:1999:MDM

[1717] 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`.

Meddahi:2015:FEA

[1718] 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`.

Meek:1982:TST

[1719] 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).

Meerbergen:2016:IRR

[1720] 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`.

Meerbergen:2017:CPA

[1721] 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 [1722].

Meerbergen:2018:ECP

[1722] 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 [1721].

Meerbergen:1996:MTC

[1723] 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

[1724] J. M. Melenk, H. Rezaijafari, 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

[1725] 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

[1726] 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

[1727] 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

[1728] 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

[1729] 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_03/190425.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190425.pdf`.

Meng:2023:MVE

[1730] 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`.

Meng:2018:DDE

[1731] 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`.

Meng:2012:SLD

[1732] 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`.

Mengi:2005:ACP

[1733] 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`.

Messaoudi:1995:SPR

[1734] 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).

Metzger:2022:CFE

[1735] 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`.

Metzger:2023:CSS

[1736] 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`.

Metzger:2025:CSS

[1737] Stefan Metzger. A convergent stochastic scalar auxiliary variable method. *IMA Journal of Numerical Analysis*, 45(4):2404–2469, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/4/2404/7816730`.

Meyer:2020:PEA

[1738] 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

[1739] Borui Miao, Giovanni Russo, and Zhennan 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 [112].

Micheletti:2008:UBA

[1740] 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

[1741] 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

[1742] 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

[1743] 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

[1744] Markku Miettinen and Jaroslav Haslinger. Approximation of nonmonotone 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

[1745] 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

[1746] 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

[1747] 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

[1748] 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

[1749] 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

[1750] 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

[1751] 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

[1752] 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

[1753] 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

[1754] 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

[1755] 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

[1756] 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

[1757] 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

[1758] 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

[1759] 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

[1760] 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

[1761] 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

[1762] 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

[1763] 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

[1764] 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

[1765] 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.oxfordjournals.org/cgi/reprint/26/3/503`.

Monegato:2023:E

[1766] Giovanni Monegato. Erratum to: "On a time-discrete convolution-space col-

location 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 [1767].

Monegato:2023:TDC

[1767] 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 [1766].

Monjezi:2023:PBA

[1768] 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

[1769] 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

[1770] 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

[1771] 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

[1772] 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

[1773] 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

[1774] 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

[1775] 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

[1776] 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

[1777] 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

[1778] 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

[1779] 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

[1780] Igor Moret and Pierpaolo Omari. A projective Newton method for semilinear 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

[1781] 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

[1782] 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

[1783] 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

[1784] 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

[1785] 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

[1786] 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

[1787] Markus Muhr, Barbara Wohlmuth, and Vanja Nikolić. A discontinuous Galerkin coupling for nonlinear elasto-acoustics. *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

[1788] 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

[1789] 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

[1790] 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

[1791] 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

[1792] 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

[1793] 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

[1794] 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

[1795] 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

[1796] 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

[1797] 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

[1798] Andrea Natale and Colin J. Cotter. Corrigendum to: A variational $\boldsymbol{H}(\mathrm{div})$ 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 [1799].

Natale:2018:VFE

[1799] Andrea Natale and Colin J. Cotter. A variational $\boldsymbol{H}(\mathrm{div})$ 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 [1798].

Navarrete:2016:ASI

[1800] 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.

Navot:1987:EMT

[1801] 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

[1802] Ion Necoara and Martin Takác. 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

[1803] 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

[1804] 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

[1805] Andreas Neuenkirch and Michaela Szölgyenyi. 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

[1806] 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

[1807] 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

[1808] 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

[1809] 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

[1810] 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

[1811] 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.oxfordjournals.org/cgi/reprint/25/3/523`.

Nicaise:2008:PEE

[1812] 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`.

Nick:2025:TDE

[1813] Jörg Nick, Selina Burkhard, and Christian Lubich. Time-dependent electromagnetic scattering from dispersive materials. *IMA Journal of Numerical Analysis*, 45(5):2545–2580, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/5/2545/7834986`.

Nie:1985:LMF

[1814] 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

[1815] 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

[1816] 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

[1817] 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

[1818] Ricardo H. Nochetto, Andreas Veeser, 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

[1819] 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

[1820] 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

[1821] 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

[1822] 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

[1823] 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

[1824] 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

[1825] 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

[1826] 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

[1827] 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:1982:AEP

[1828] 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:FLM

[1829] P. Oliver. A family of linear multistep 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).

Olshanskii:2014:SFE

[1830] 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.

Olver:1982:FDE

[1831] 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:1983:EBA

[1832] 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

[1833] 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

[1834] 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

[1835] 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

[1836] 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

[1837] 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).

ONeill:2021:LBN

[1838] 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

[1839] 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

[1840] Christoph Ortner and Hao Wang. A posteriori error control for a quasicontinuum approximation of a periodic chain. *IMA Journal of Numerical Analysis*, 34(3):977–1001, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://imajna.oxfordjournals.org/content/34/3/977.

Osada:1992:MOS

[1841] 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

[1842] 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

[1843] 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

[1844] 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

[1845] 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

[1846] 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

[1847] 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

[1848] 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`.

Oswald:1998:OMP

[1849] Peter Oswald. An optimal multilevel 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

[1850] 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

[1851] 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

[1852] 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

[1853] 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

[1854] 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

[1855] 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

[1856] 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

[1857] 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

[1858] 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

[1859] 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

[1860] 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.

Pani:2005:SFE

[1861] 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

[1862] 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

[1863] 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).

Papamichael:1986:PCN

[1864] 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

[1865] 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

[1866] 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

[1867] 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.

Parlett:1981:TPL

[1868] 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

[1869] 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

[1870] 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

[1871] 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

[1872] 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

[1873] 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

[1874] Gilbert Peralta and Karl Kunisch. Analysis and finite element discretiza-

tion 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

[1875] 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:2010:SRB

[1876] 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:1985:EMC

[1877] 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

[1878] 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

[1879] 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).

Phillips:1986:PSM

[1880] 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

[1881] 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

[1882] 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

[1883] 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

[1884] 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

[1885] 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

[1886] 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

[1887] 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

[1888] 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

[1889] 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

[1890] 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

[1891] Arnak Poghosyan. On an autocorrection 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). URL http://imajna.oxfordjournals.org/content/31/2/512.full.pdf+html.

Pollock:2021:AAC

[1892] 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

[1893] 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

[1894] D. Porter and D. S. G. Stirling. The reiterated Galerkin method. *IMA Journal of Numerical Analysis*, 13(1):125–139, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Potra:1994:LOM

[1895] 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 IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Potts:2001:NLA

[1896] 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.

Potzsche:2010:CIM

[1897] 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

[1898] 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

[1899] 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

[1900] 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

[1901] 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

[1902] 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

[1903] 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

[1904] 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

[1905] 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

[1906] 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

[1907] 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

[1908] 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

[1909] 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

[1910] 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

[1911] 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

[1912] 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

[1913] 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

[1914] 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

[1915] 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

[1916] 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 [1917].

Prohl:2025:CCR

[1917] 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 [1916].

Pruess:1993:SPC

[1918] 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

[1919] 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

[1920] 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

[1921] 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

[1922] R. Pytlak. On the convergence of conjugate gradient algorithms. *IMA Journal of Numerical Analysis*, 14(3):443–460, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Qi:2011:ALD

[1923] 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

[1924] 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

[1925] 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

[1926] Ouyuan Qin and Kuan Xu. Solving nonlinear ODEs with the ultraspherical 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

[1927] 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

[1928] 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

[1929] 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

[1930] 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

[1931] 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

[1932] 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

[1933] 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

[1934] 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

[1935] 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

[1936] 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

[1937] S. S. Ravindran. Partitioned time-stepping scheme for an MHD system with temperature-dependent coefficients. *IMA Journal of Numerical 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

[1938] 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

[1939] 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

[1940] 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

[1941] Teresa Regińska. Superconvergence of external approximation of eigenvalues of ordinary differential operators. *IMA Journal of Numerical Analysis*, 6(3):309–323, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Reifenberg:2000:NSB

[1942] 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

[1943] 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

[1944] 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

[1945] 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

[1946] 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

[1947] 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

[1948] 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

[1949] 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

[1950] 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

[1951] 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

[1952] 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

[1953] 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

[1954] 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).

Roden:2025:MSE

[1955] Jonna C. Roden, Rory D. Mills-Williams, John W. Pearson, and Benjamin D. Goddard. MultiShape: a spectral element method, with applications to Dynamic Density Functional Theory and PDE-constrained optimization. *IMA Journal of Numerical Analysis*, 45(4):2470–2504, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/4/2470/7824090.

Rodriguez:2017:GST

[1956] 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

[1957] 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/Issue_02/240255.sgm.abs.html; http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240255.pdf.

Rodriguez:1993:NIL

[1958] 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

[1959] Lucia Romani, Victoria Hernández Mederos, and Jorge Estrada Sar-

labous. 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

[1960] 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

[1961] 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

[1962] 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

[1963] Tomás Roubícek. 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

[1964] D. V. Rovas, L. Machiels, and Y. Maday. 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

[1965] 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

[1966] 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

[1967] 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

[1968] 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

[1969] 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

[1970] 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

[1971] 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

[1972] 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

[1973] Norikazu Saito. Conservative upwind 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

[1974] 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

[1975] 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

[1976] 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`.

Sander:2016:GFE

[1977] 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

[1978] 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

[1979] 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

[1980] Ángel Santos-Palomo and Pablo Guerrero-García. Updating and downdating 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

[1981] 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

[1982] 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

[1983] 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

[1984] 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

[1985] 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:SAA

[1986] 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

[1987] 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

[1988] 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`.

Saunders:1984:VIS

[1989] 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

[1990] 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

[1991] 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

[1992] F. P. Sayer. Some aspects of infinite systems of linear simultaneous equations. *IMA Journal of Numerical Analysis*, 3(3):333–340, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Schagen:1984:SEU

[1993] 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

[1994] 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`.

Schecter:1995:RCN

[1995] Stephen Schecter. 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

[1996] 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

[1997] 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

[1998] 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

[1999] 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

[2000] Joachim Schöberl, Jens M. Melenk, Clemens Pechstein, and Sabine Zaglmayr. 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/reprint/28/1/1.

Schock:1985:ASC

[2001] 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

[2002] 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

[2003] 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

[2004] 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

[2005] 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

[2006] 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).

Schotzau:2021:ECM

[2007] 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.

Schotzau:2001:ECG

[2008] 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.

Schotzau:2004:MHD

[2009] 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

[2010] 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

[2011] 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

[2012] 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

[2013] 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

[2014] 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

[2015] 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

[2016] 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

[2017] 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

[2018] 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

[2019] 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

[2020] 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

[2021] 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

[2022] 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

[2023] 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

[2024] 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

[2025] 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

[2026] 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

[2027] 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

[2028] 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

[2029] 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 IJ-

NADH. 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

[2030] 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

[2031] 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

[2032] 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

[2033] 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

[2034] 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

[2035] 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

[2036] 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

[2037] 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

[2038] 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

[2039] 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.oup.com/imajna/article/40/1/207/5195702`.

Simoncini:2014:TNM

[2040] 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

[2041] 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

[2042] 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

[2043] 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

[2044] 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

[2045] 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

[2046] 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

[2047] 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/imajna/article/38/1/102/3038020`.

Sloan:1981:SAC

[2048] 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

[2049] 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

[2050] 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

[2051] 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

[2052] 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

[2053] 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

[2054] 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

[2055] 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

[2056] 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

[2057] 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

[2058] 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

[2059] 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

[2060] Jarle Sogn and Walter Zulehner. Schur complement preconditioners for multiple 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

[2061] 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

[2062] 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

[2063] 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

[2064] 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

[2065] 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

[2066] 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

[2067] Ercília 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

[2068] 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

[2069] 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

[2070] 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

[2071] 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

[2072] 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

[2073] 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 [2074].

Stein:1998:EBH

[2074] 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 [2073].

Steinbach:2016:TFP

[2075] Olaf Steinbach, Barbara Wohlmuth, and Linus Wunderlich. Trace and flux a priori error estimates in finite-element approximations of Signorni-type 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

[2076] 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

[2077] 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

[2078] 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

[2079] 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

[2080] 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

[2081] 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

[2082] 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

[2083] 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

[2084] 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

[2085] 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

[2086] 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

[2087] 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

[2088] 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

[2089] Martin Stynes and Lutz Tobiska. The streamline-diffusion method for nonconforming 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

[2090] 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

[2091] Endre Süli and Tabea Tscherpel. Fully discrete finite element approximation of unsteady flows of implicitly constituted incompressible fluids. *IMA Jour-*

nal 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

[2092] 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

[2093] 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

[2094] Ji-Guang Sun. Optimal backward perturbation bounds for the linear least-squares problem with multiple 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

[2095] 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

[2096] 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

[2097] 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

[2098] 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

[2099] 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

[2100] 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

[2101] 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

[2102] 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

[2103] 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

[2104] 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

[2105] 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:2025:LSM

[2106] Ting Tan and Waixiang Cao. Legendre spectral method and error estimates for Helmholtz transmission eigenvalues in a cylinder. *IMA Journal of Numerical Analysis*, 45(3):1585–1613, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1585/7696870`.

Tan:2020:STP

[2107] 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

[2108] 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

[2109] 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

[2110] Ken'ichiro Tanaka and Masaaki Sugihara. Design of accurate formulas 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/imajna/article/39/4/1957/5075943`.

Tang:1993:NCM

[2111] 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

[2112] 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/imajna/article/42/2/1789/6263485`.

Tao:2016:VLI

[2113] 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://imajna.oxfordjournals.org/content/36/1/80`.

Tarvainen:1999:TLS

[2114] 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

[2115] 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://imajna.oxfordjournals.org/cgi/content/abstract/30/2/462; http://imajna.oxfordjournals.org/cgi/reprint/30/2/462`.

teRiele:1982:CMW

[2116] 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

[2117] 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

[2118] 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

[2119] 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

[2120] 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

[2121] 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

[2122] 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

[2123] 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

[2124] 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

[2125] 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

[2126] 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

[2127] 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

[2128] 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

[2129] 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

[2130] Manuel Torrilhon and Kun Xu. Stability and consistency of kinetic upwinding 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

[2131] 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

[2132] 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

[2133] 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

[2134] 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

[2135] 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

[2136] 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:2025:CFS

[2137] Thomas Trogdon. On the convergence of Fourier spectral methods involving noncompact operators. *IMA*

Journal of Numerical Analysis, 45 (3):1743–1785, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1743/7717775`.

Trogdon:2016:RHA

[2138] Thomas Trogdon and Sheehan Olver. A Riemann–Hilbert approach to Jacobi 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

[2139] 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

[2140] 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

[2141] Jukka Tuomela, Teijo Arponen, and Villesamuli 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

[2142] 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

[2143] 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

[2144] 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

[2145] André Uschmajew and Bart Vandereycken. On critical points of quadratic low-rank matrix optimization problems. *IMA Journal of Numerical Anal-*

ysis, 40(4):2626–2651, October 2020. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/40/4/2626/5743529.

Valvi:1987:AID

[2146] 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

[2147] 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

[2148] 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/imajna/article/42/4/3272/6381969.

VanDenHeuvel:2001:URC

[2149] 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

[2150] 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

[2151] 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

[2152] 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

[2153] 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

[2154] 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

[2155] 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

[2156] 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

[2157] 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

[2158] 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`.

vanDorsselaer:1994:ECS

[2159] J. L. M. van Dorsselaer 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).

vanDorsselaer:1999:IMP

[2160] Jos L. M. van Dorsselaer 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

[2161] 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

[2162] 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

[2163] 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

[2164] 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.

Veeser:2012:PCF

[2165] Andreas Veeser 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

[2166] Tomás 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

[2167] 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

[2168] Barbara Verfürth. 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

[2169] R. Verfürth. 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

[2170] Jesús 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

[2171] 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

[2172] 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

[2173] 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).

vonHallern:2025:ESR

[2174] Claudine von Hallern, Ricarda Missfeldt, and Andreas Rössler. An exponential stochastic Runge–Kutta type method of order up to 1.5 for SPDEs of Nemytskii-type. *IMA Journal of Numerical Analysis*, 45(4):2361–2403, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/4/2361/7824079`.

vonWahl:2022:UEF

[2175] 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

[2176] 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

[2177] 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

[2178] 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

[2179] 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

[2180] 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

[2181] 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

[2182] 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

[2183] 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

[2184] Gang Wang, Jian Meng, Ying Wang, and Liquan 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

[2185] 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`.

Wang:2017:FAC

[2186] 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

[2187] 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

[2188] 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

[2189] Jihong Wang, Jerry Zhijian Yang, and Jiwei Zhang. Stability and convergence analysis of high-order numerical 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

[2190] 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

[2191] 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:EHV

[2192] Lina Wang, Mingzhu Zhang, Hongjiong Tian, and Lijun Yi. *hp*-version C^1-continuous Petrov–Galerkin method for nonlinear second-order initial value problems with application to wave equations. *IMA Journal of Numerical Analysis*, 45(3):1455–1500, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/3/1455/7696869`.

Wang:2025:LIF

[2193] 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

[2194] 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

[2195] 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

[2196] 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

[2197] 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

[2198] 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

[2199] 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

[2200] 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

[2201] 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

[2202] 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

[2203] 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

[2204] 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

[2205] 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

[2206] 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

[2207] A. J. Wathen. Realistic eigenvalue bounds for the Galerkin mass matrix. *IMA Journal of Numerical Analysis*, 7(4):449–457, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Wathen:1985:SMF

[2208] 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

[2209] 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

[2210] 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

[2211] 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

[2212] 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

[2213] 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

[2214] 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

[2215] 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

[2216] 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

[2217] 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

[2218] 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`.

Wei:2025:UED

[2219] Yifan Wei, Jiwei Zhang, Chengchao Zhao, and Yanmin Zhao. An unconditionally energy dissipative, adaptive IMEX BDF2 scheme and its error estimates for Cahn–Hilliard equation on generalized SAV approach. *IMA Journal of Numerical Analysis*, 45(4):2171–2203, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/4/2171/7769725`.

Weideman:2010:ICI

[2220] 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

[2221] 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

[2222] 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

[2223] 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

[2224] 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

[2225] 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

[2226] 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

[2227] 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

[2228] 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

[2229] 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

[2230] 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

[2231] 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

[2232] 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

[2233] 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

[2234] 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

[2235] 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

[2236] 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

[2237] Haijun Wu and Zhimin Zhang. Enhancing eigenvalue approximation by gradient recovery on adaptive

meshes. *IMA Journal of Numerical Analysis*, 29(4):1008–1022, October 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

[2238] 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

[2239] 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

[2240] 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

[2241] 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

[2242] 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

[2243] 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

[2244] 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

[2245] 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

[2246] 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

[2247] 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

[2248] 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 [2249].

Xiang:2013:ECC

[2249] 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 [2248].

Xie:2010:SEP

[2250] 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

[2251] 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

[2252] 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

[2253] 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

[2254] 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

[2255] 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

[2256] 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

[2257] Journal Xuejun Xu, S. H. Lui, and T. Rahman. A two-level additive Schwarz method for the Morley nonconforming 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

[2258] 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

[2259] 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

[2260] Plamen Y. Yalamov and Marcin Paprzycki. 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

[2261] 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 IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Yan:2003:SPA

[2262] 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

[2263] 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

[2264] 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

[2265] 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

[2266] Min Yang, Jiangguo 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

[2267] Min Yang, Jiangguo 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

[2268] 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

[2269] 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

[2270] 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

[2271] 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

[2272] 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

[2273] 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

[2274] 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

[2275] 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

[2276] 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

[2277] 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

[2278] 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

[2279] 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

[2280] 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.

Zeinhofer:2025:UFE

[2281] Marius Zeinhofer, Rami Masri, and Kent-André Mardal. A unified framework for the error analysis of physics-informed neural networks. *IMA Journal of Numerical Analysis*, 45(5):2988–3025, September 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/5/2988/7904789.

Zhang:2004:SAR

[2282] 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

[2283] 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

[2284] 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

[2285] 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

[2286] 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

[2287] 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

[2288] 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

[2289] 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

[2290] 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:2025:BRI

[2291] Kelong Zhao and Shuhuang Xiang. Barycentric rational interpolation of exponentially clustered poles. *IMA Journal of Numerical Analysis*, 45 (3):1558–1584, May 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/3/1558/7708718.

Zhao:2025:EPE

[2292] Lina Zhao. *A priori* and *a posteriori* error analysis of a mixed DG method for the three-field quasi-Newtonian Stokes flow. *IMA Journal of Numerical Analysis*, 45(4):2505–2543, July 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL http://academic.oup.com/imajna/article/45/4/2505/7808375.

Zhao:2023:LFS

[2293] 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

[2294] 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

[2295] Ning Zhao and Jia Zun Dai. Uniformly third-order accurate TVNE interpolations. *IMA Journal of Numerical Analysis*, 13(2):255–261, 1993. CODEN IJ-

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

Zhao:2021:ESP

[2296] 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

[2297] 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

[2298] 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

[2299] 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

[2300] 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

[2301] 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

[2302] K. Ziętak. The properties of the minimax 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

[2303] 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

[2304] K. Zięţak. 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

[2305] 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

[2306] 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`.