A Complete Bibliography of Publications in *SIAM Journal on Numerical Analysis*: 1964–1999

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References

Aalto:1972:RFS

[Aal72] S. K. Aalto. The representation of functionals on subspaces by functionals having certain support sets. *SIAM Journal on Numerical Analysis*, 9(1):35–39, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ascher:1986:SCG

[AB86] U. Ascher and G. Bader. Stability of collocation at Gaussian points. *SIAM Journal on Numerical Analysis*, 23(2): 412–422, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Allgower:1987:AMI

[AB87] E. L. Allgower and K. Böhmer. Application of the mesh independence principle to mesh refinement strategies. *SIAM Journal on Numerical Analysis*, 24(6):1335–1351, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ainsworth:1999:RRP

[AB99] Mark Ainsworth and Ivo Babuška. Reliable and robust A posteriori error estimation for singularly perturbed reaction-diffusion problems. *SIAM Journal on Numerical Analysis*, 36(2):331–353, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32187`.

Ashby:1995:LAA

[ABDH95] S. F. Ashby, P. N. Brown, M. R. Dorr, and A. C. Hindmarsh. A linear algebraic analysis of diffusion synthetic acceleration for the Boltzmann transport equation. *SIAM Journal on Numerical Analysis*, 32(1):128–178, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Abgrall:1998:MRU

[Abg98] Rémi Abgrall. Multiresolution representation in unstructured meshes. *SIAM Journal on Numerical Analysis*, 35(6):2128–2146, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31505`.

Allgower:1992:ESB

[ABGM92] Eugene L. Allgower, Klaus Böhmer, Kurt Georg, and Rick Miranda. Exploiting symmetry in boundary element methods. *SIAM Journal on Numerical Analysis*, 29(2):534–552, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ablow:1972:CFD

[Abl72] C. M. Ablow. A characteristic finite difference method for the wave equation in two dimensions. *SIAM Journal on Numerical Analysis*, 9(1):152–164, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Amodio:1993:PFT

[ABP93] P. Amodio, L. Brugnano, and T. Politi. Parallel factorizations for tridiagonal matrices. *SIAM Journal on Numerical Analysis*, 30(3):813–823, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Allgower:1986:MIP

[ABPR86] E. L. Allgower, K. Böhmer, F.-A. Potra, and W. C. Rheinboldt. A mesh-independence principle for operator equations and their discretizations. *SIAM Journal on Numerical Analysis*, 23(1):160–169, February 1986. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Avila:1979:UMH

[AC79] J. H. Avila and P. Concus. Updata methods for highly structured systems of nonlinear equations. *SIAM Journal on Numerical Analysis*, 16 (2):260–269, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ahues:1983:UDC

[AC83] Mario Ahués and Françoise Chatelin. The use of defect correction to refine the eigenelements of compact integral operators. *SIAM Journal on Numerical Analysis*, 20(6):1087–1093, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alexander:1990:RKM

[AC90] Roger K. Alexander and James J. Coyle. Runge–Kutta methods and differential-algebraic systems. *SIAM Journal on Numerical Analysis*, 27(3):736–752, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ascher:1993:MMS

[AC93] Uri M. Ascher and Paul M. Carter. A multigrid method for shape-from-shading. *SIAM Journal on Numerical Analysis*, 30(1):102–115, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Andre:1996:UNA

[AC96a] N. André and M. Chipot. Uniqueness and nonuniqueness for the approximation of quasilinear elliptic equations. *SIAM Journal on Numerical Analysis*, 33(5): 1981–1994, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26740`.

Arandiga:1996:MSF

[AC96b] Francesc Aràndiga and Vicente F. Candela. Multiresolution standard form of a matrix. *SIAM Journal on Numerical Analysis*, 33(2): 417–434, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Aubry:1998:ICR

[AC98] A. Aubry and P. Chartier. On improving the convergence of Radau IIA methods applied to index 2 DAEs. *SIAM Journal on Numerical Analysis*, 35 (4):1347–1367, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29653`.

Abate:1968:NMG

[AD68] J. Abate and H. Dubner. A new method for generating power series expansions of functions. *SIAM Journal on Numerical Analysis*, 5(1): 102–112, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Archer:1978:FMC

[AD78] David Archer and Julio Cesar Diaz. A family of modified collocation methods for second order two point boundary value problems. *SIAM Journal on Numerical Analysis*, 15 (2):242–254, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Arge:1992:GPI

[AD92] Erlend Arge and Morten Dæhlen. Grid point interpolation on finite regions using C^1 box splines. *SIAM Journal on Numerical Analysis*, 29(4): 1136–1153, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Arandiga:1999:MBW

[ADH99] Francesc Aràndiga, Rosa Donat, and Ami Harten. Multiresolution based on weighted averages of the hat function I: Linear reconstruction techniques. *SIAM Journal on Numerical Analysis*, 36 (1):160–203, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30877`.

Aziz:1982:NAM

[ADK82] A. K. Aziz, M. R. Dorr, and R. B. Kellogg. A new approximation method for the Helmholtz equation in an exterior domain. *SIAM Journal on Numerical Analysis*, 19(5): 899–908, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Akrivis:1996:EEF

[ADZ96] G. D. Akrivis, V. A. Dougalis, and G. E. Zouraris. Error estimates for finite difference methods for a wide-angle “Parabolic” equation. *SIAM Journal on Numerical Analysis*, 33(6): 2488–2509, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26635`.

Addison:1984:PMF

[AE84] C. A. Addison and W. H. Enright. Properties of multistep formulas intended for a class of second order ODEs. *SIAM Journal on Numerical Analysis*, 21(2):327–339, April 1984. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Asadzadeh:1994:AFE

[AE94] Mohammad Asadzadeh and Kenneth Eriksson. On adaptive finite element methods for Fredholm integral equations of the second kind. *SIAM Journal on Numerical Analysis*, 31(3):831–855, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ames:1997:KBM

[AE97] Karen A. Ames and James F. Epperson. A kernel-based method for the approximate solution of backward parabolic problems. *SIAM Journal on Numerical Analysis*, 34(4):1357–1390, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27678`.

Askey:1968:PCN

[AF68] Richard Askey and James Fitch. Positivity of the Cotes numbers for some ultraspherical abscissas. *SIAM Journal on Numerical Analysis*, 5 (2):199–201, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Adjerid:1986:MFE

[AF86] Slimane Adjerid and Joseph E. Flaherty. A moving finite element method with error estimation and refinement for one-dimensional time dependent partial differential equations. *SIAM Journal on Numerical Analysis*, 23(4): 778–796, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Arnold:1989:UAF

[AF89] Douglas N. Arnold and Richard S. Falk. A uniformly accurate finite element method for the Reissner–Mindlin plate. *SIAM Journal on Numerical Analysis*, 26(6): 1276–1290, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Auzinger:1990:AEE

[AFM90] W. Auzinger, R. Frank, and F. Macsek. Asymptotic error expansions for stiff equations: The implicit Euler scheme. *SIAM Journal on Numerical Analysis*, 27(1): 67–104, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Afriat:1970:PSM

[Afr70] S. N. Afriat. The progressive support method for convex programming. *SIAM Journal on Numerical Analysis*, 7

(3):447–457, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atchison:1968:NTR

[AG68] T. A. Atchison and H. L. Gray. Nonlinear transformations related to the evaluation of improper integrals. II. *SIAM Journal on Numerical Analysis*, 5(2):451–459, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Anderson:1985:VM

[AG85] Christopher Anderson and Claude Greengard. On vortex methods. *SIAM Journal on Numerical Analysis*, 22 (3):413–440, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Allgower:1987:APL

[AG87] Eugene L. Allgower and Stefan Gnutzmann. An algorithm for piecewise linear approximation of implicitly defined two-dimensional surfaces. *SIAM Journal on Numerical Analysis*, 24(2): 452–469, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Aves:1997:DEC

[AGH97] Mark A. Aves, David F. Griffiths, and Desmond J. Higham. Does error control suppress spuriosity? *SIAM Journal on Numerical Analysis*, 34(2):756–778, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27698`.

Allgower:1992:MRC

[AGM92] Eugene L. Allgower, Kurt Georg, and Rick Miranda. The method of resultants for computing real solutions of polynomial systems. *SIAM Journal on Numerical Analysis*, 29(3):831–844, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alefeld:1994:ENV

[AGP94] G. Alefeld, A. Gienger, and F. Potra. Efficient numerical validation of solutions of nonlinear systems. *SIAM Journal on Numerical Analysis*, 31(1): 252–260, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1983:PCC

[AGS83] K. Atkinson, I. Graham, and I. Sloan. Piecewise continuous collocation for integral equations. *SIAM Journal on Numerical Analysis*, 20(1):172–186, February 1983. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Alefeld:1974:CSS

[AH74] G. Alefeld and J. Herzberger. On the convergence speed of some algorithms for the simultaneous approximation of polynomial roots. *SIAM Journal on Numerical Analysis*, 11(2):237–243, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Allinger:1976:ASD

[AH76] Glenn Allinger and Myron Henry. Approximate solutions of differential equations with deviating arguments. *SIAM Journal on Numerical Analysis*, 13(3):412–426, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Armstrong:1977:ARD

[AH77] Ronald D. Armstrong and John W. Hultz. An algorithm for a restricted discrete approximation problem in the L_1 norm. *SIAM Journal on Numerical Analysis*, 14 (3):555–565, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Amit:1982:SRP

[AH82] R. Amit and C. Hall. Storage requirements for profile and frontal elimination. *SIAM Journal on Numerical Analysis*, 19(1):205–218, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Apel:1994:MRW

[AH94] Th. Apel and B. Heinrich. Mesh refinement and windowing near edges for some elliptic problem. *SIAM Journal on Numerical Analysis*, 31 (3):695–708, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ahlfors:1966:RCF

[Ahl66] Lars V. Ahlfors. Remarks on Carleman's formula for functions in a halfplane. *SIAM Journal on Numerical Analysis*, 3(2):183–187, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ainsworth:1996:PBD

[Ain96] Mark Ainsworth. A preconditioner based on domain decomposition for *h*-*p* finite-element approximation on quasi-uniform meshes. *SIAM Journal on Numerical Analysis*, 33(4):1358–1376, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25822`.

Albrecht:1984:EIM

[AK84] P. Albrecht and M. P. Klein. Extrapolated iterative methods for linear systems. *SIAM Journal on Numerical Analysis*, 21(1):192–201, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Axelsson:1990:MDE

[AK90] O. Axelsson and L. Kolotilina. Monotonicity and discretization error estimates. *SIAM Journal on Numerical Analysis*, 27(6):1591–1611, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Axelsson:1998:MRA

[AK98] O. Axelsson and I. E. Kaporin. Minimum residual adaptive multilevel finite element procedure for the solution of nonlinear stationary problems. *SIAM Journal on Numerical Analysis*, 35(3):1213–1229, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28642`.

Akrivis:1999:FDM

[Akr99] Georgios Akrivis. Finite difference methods for the wide-angle "Parabolic" equation. *SIAM Journal on Numerical Analysis*, 36(1):317–329, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30851`.

Aziz:1978:FEA

[AL78] A. K. Aziz and S. Leventhal. Finite element approximation for first order systems. *SIAM Journal on Numerical Analysis*, 15(6):1103–1111, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Aziz:1991:WLS

[AL91] A. K. Aziz and J.-L. Liu. A weighted least squares method for the backward-forward heat equation. *SIAM Journal on Numerical Analysis*, 28(1):156–167, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ascher:1996:SRM

[AL96a] Uri M. Ascher and Ping Lin. Sequential regularization methods for higher index DAEs with constraint singularities: The linear index-2 case. *SIAM Journal on Numerical Analysis*, 33(5):1921–1940, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25325`.

Axelsson:1996:TLM

[AL96b] O. Axelsson and W. Layton. A two-level method for the discretization of nonlinear boundary value problems. *SIAM Journal on Numerical Analysis*, 33(6): 2359–2374, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/24710.

Albrecht:1987:NTA

[Alb87] Peter Albrecht. A new theoretical approach to Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 24 (2):391–406, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Albrecht:1996:RKT

[Alb96] Peter Albrecht. The Runge–Kutta theory in a nutshell. *SIAM Journal on Numerical Analysis*, 33(5): 1712–1735, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26087.

Alexander:1977:DIR

[Ale77] Roger Alexander. Diagonally implicit Runge–Kutta methods for stiff O.D.E.'s. *SIAM Journal on Numerical Analysis*, 14(6):1006–1021, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alefeld:1984:CSI

[Ale84] G. Alefeld. On the convergence of some interval-arithmetic modifications of Newton's method. *SIAM Journal on Numerical Analysis*, 21(2):363–372, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alexander:1987:AIP

[Ale87] J. C. Alexander. Average intersection and pivoting densities. *SIAM Journal on Numerical Analysis*, 24(1):129–146, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alexander:1994:SRK

[Ale94] Roger K. Alexander. Stability of Runge–Kutta methods for stiff ordinary differential equations. *SIAM Journal on Numerical Analysis*, 31(4): 1147–1168, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alfeld:1985:MPI

[Alf85] Peter Alfeld. Multivariate perpendicular interpolation. *SIAM Journal on Numerical Analysis*, 22(1):95–106, February 1985. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Alfeld:1996:ULB

[Alf96] Peter Alfeld. Upper and lower bounds on the dimension of multivariate spline spaces. *SIAM Journal on Numerical Analysis*, 33(2): 571–588, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alvarez:1992:ISS

[ALM92] Luis Alvarez, Pierre-Louis Lions, and Jean-Michel Morel. Image selective smoothing and edge detection by nonlinear diffusion. II. *SIAM Journal on Numerical Analysis*, 29 (3):845–866, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alouges:1997:NAC

[Alo97] François Alouges. A new algorithm for computing liquid crystal stable configurations: The harmonic mapping case. *SIAM Journal on Numerical Analysis*, 34 (5):1708–1726, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26424`.

Adams:1988:ASI

[ALY88] Loyce M. Adams, Randall J. LeVeque, and David M. Young. Analysis of the SOR iteration for the 9-point Laplacian. *SIAM Journal on Numerical Analysis*, 25 (5):1156–1180, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Arbogast:1989:FDM

[AM89] Todd Arbogast and Fabio A. Milner. A finite difference method for a two-sex model of population dynamics. *SIAM Journal on Numerical Analysis*, 26(6):1474–1486, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alvarez:1994:SIR

[AM94] Luis Alvarez and Luis Mazorra. Signal and image restoration using shock filters and anisotropic diffusion. *SIAM Journal on Numerical Analysis*, 31(2): 590–605, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ashwin:1998:NBF

[AM98] Peter Ashwin and Zhen Mei. A numerical bifurcation function for homoclinic orbits. *SIAM Journal on Numerical Analysis*, 35 (5):2055–2069, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http:/`

/epubs.siam.org/sam-bin/dbq/article/29816.

Ashby:1990:TCG

[AMS90] Steven F. Ashby, Thomas A. Manteuffel, and Paul E. Saylor. A taxonomy for conjugate gradient methods. *SIAM Journal on Numerical Analysis*, 27(6):1542–1568, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Araujo:1997:SMB

[AMSS97] A. L. Araújo, A. Murua, and J. M. Sanz-Serna. Symplectic methods based on decompositions. *SIAM Journal on Numerical Analysis*, 34(5):1926–1947, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/29212.

Ainsworth:1999:CBE

[AMT99] Mark Ainsworth, William McLean, and Thanh Tran. The conditioning of boundary element equations on locally refined meshes and preconditioning by diagonal scaling. *SIAM Journal on Numerical Analysis*, 36(6):1901–1932, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/33080.

Achdou:1999:ISP

[AMW99] Yves Achdou, Yvon Maday, and Olof Widlund. Iterative substructuring preconditioners for mortar element methods in two dimensions. *SIAM Journal on Numerical Analysis*, 36(2):551–580, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/32100.

Ahlberg:1966:ALF

[AN66] J. H. Ahlberg and E. N. Nilson. The approximation of linear functionals. *SIAM Journal on Numerical Analysis*, 3(2):173–182, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Andrus:1979:NSS

[And79] J. F. Andrus. Numerical solution of systems of ordinary differential equations separated into subsystems. *SIAM Journal on Numerical Analysis*, 16(4):605–611, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Andrus:1983:AIS

[And83a] J. F. Andrus. Automatic integration of systems of second-order ODE's separated into subsystems. *SIAM Journal on Numerical Analysis*, 20(4):

815–827, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Andrus:1983:CAP

[And83b] J. F. Andrus. Convergence and accuracy properties of the method of quasilinearization. *SIAM Journal on Numerical Analysis*, 20(4):828–839, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Anonymous:1973:CAD

[Ano73] Anonymous. Collection of articles dedicated to the memory of George E. Forsythe. *SIAM Journal on Numerical Analysis*, 10(2):i–xi + 241–432, 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Anselone:1967:UAT

[Ans67] P. M. Anselone. Uniform approximation theory for integral equations with discontinuous kernels. *SIAM Journal on Numerical Analysis*, 4 (2):245–253, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Abrahamsson:1982:MDS

[AO82] Leif Abrahamsson and Stanley Osher. Monotone difference schemes for singular perturbation problems. *SIAM Journal on Numerical Analysis*, 19(5):979–992, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Arbogast:1993:NMS

[AOW93] Todd Arbogast, Mandri Obeyesekere, and Mary F. Wheeler. Numerical methods for the simulation of flow in root-soil systems. *SIAM Journal on Numerical Analysis*, 30(6):1677–1702, December 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ackerberg:1973:NMH

[AP73] R. C. Ackerberg and J. H. Phillips. A numerical method for highly accelerated laminar boundary-layer flows. *SIAM Journal on Numerical Analysis*, 10(1):147–160, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alefeld:1983:QCK

[AP83] G. Alefeld and L. Platzöder. A quadratically convergent Krawczyk-like algorithm. *SIAM Journal on Numerical Analysis*, 20(1):210–219, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1987:PIP

[AP87] Kendall E. Atkinson and Florian A. Potra. Projection and iterated projection methods for nonlinear integral equations. *SIAM Journal on Numerical Analysis*, 24(6):1352–1373, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ascher:1991:PIR

[AP91] Uri M. Ascher and Linda R. Petzold. Projected implicit Runge–Kutta methods for differential-algebraic equations. *SIAM Journal on Numerical Analysis*, 28(4):1097–1120, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Achdou:1995:FSN

[AP95a] Y. Achdou and O. Pironneau. A fast solver for Navier–Stokes equations in the laminar regime using mortar finite element and boundary element methods. *SIAM Journal on Numerical Analysis*, 32(4):985–1016, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ascher:1995:NSD

[AP95b] Uri M. Ascher and Linda R. Petzold. The numerical solution of delay-differential-algebraic equations of retarded and neutral type. *SIAM Journal on Numerical Analysis*, 32(5):1635–1657, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ascher:1983:SBS

[APR83] U. Ascher, S. Pruess, and R. D. Russell. On spline basis selection for solving differential equations. *SIAM Journal on Numerical Analysis*, 20(1):121–142, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alfeld:1987:EBQ

[APS87] Peter Alfeld, Bruce Piper, and L. L. Schumaker. An explicit basis for C^1 quartic bivariate splines. *SIAM Journal on Numerical Analysis*, 24(4):891–911, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Aird:1977:SSH

[AR77] Thomas J. Aird and John R. Rice. Systematic search in high dimensional sets. *SIAM Journal on Numerical Analysis*, 14(2):296–312, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alefeld:1981:ERF

[AR81] G. Alefeld and J. G. Rokne. On the evaluation of rational functions in interval arithmetic. *SIAM Journal on Numerical Analysis*, 18(5):862–870, October 1981. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Arnold:1995:OSM

[AR95] Anton Arnold and Christian Ringhofer. Operator splitting methods applied to spectral discretizations of quantum transport equations. *SIAM Journal on Numerical Analysis*, 32(6):1876–1894, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Arnold:1996:OSM

[AR96] Anton Arnold and Christian Ringhofer. An operator splitting method for the Wigner–Poisson problem. *SIAM Journal on Numerical Analysis*, 33(4):1622–1643, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23882`.

Arbogast:1989:ASS

[Arb89] Todd Arbogast. Analysis of the simulation of single phase flow through a naturally fractured reservoir. *SIAM Journal on Numerical Analysis*, 26(1):12–29, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Archer:1977:CSC

[Arc77] David Archer. An $O(h^4)$ cubic spline collocation method for quasilinear parabolic equations. *SIAM Journal on Numerical Analysis*, 14(4):620–637, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Archer:1978:CSF

[Arc78] David Archer. Collocation in C^0 spaces for first order hyperbolic equations. I: Optimal order global estimates for quasilinear problems. *SIAM Journal on Numerical Analysis*, 15(2):271–281, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Arnold:1982:IPF

[Arn82] Douglas N. Arnold. An interior penalty finite element method with discontinuous elements. *SIAM Journal on Numerical Analysis*, 19(4):742–760, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ascher:1995:IEM

[ARW95] Uri M. Ascher, Steven J. Ruuth, and Brian T. R. Wetton. Implicit-explicit methods for time-dependent partial differential equations. *SIAM Journal on Numerical Analysis*, 32(3):797–823, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1969:PCP

[AS69] K. Atkinson and A. Sharma. A partial characterization of poised Hermite–Birkhoff interpolation problems. *SIAM Journal on Numerical Analysis*, 6(2):230–235, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Abu-Shumays:1980:RSD

[AS80] I. K. Abu-Shumays. Resolution of singularities of the diamond difference approximation. *SIAM Journal on Numerical Analysis*, 17(6):794–805, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Arnold:1984:ACS

[AS84] Douglas N. Arnold and Jukka Saranen. On the asymptotic convergence of spline collocation methods for partial differential equations. *SIAM Journal on Numerical Analysis*, 21(3):459–472, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Allgower:1985:APL

[AS85] Eugene L. Allgower and Phillip H. Schmidt. An algorithm for piecewise-linear approximation of an implicitly defined manifold. *SIAM Journal on Numerical Analysis*, 22 (2):322–346, April 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Asadzadeh:1986:AFD

[Asa86] Mohammad Asadzadeh. Analysis of a fully discrete scheme for neutron transport in two-dimensional geometry. *SIAM Journal on Numerical Analysis*, 23(3):543–561, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Asadzadeh:1989:EEE

[Asa89] Mohammad Asadzadeh. L_p and eigenvalue error estimates for the discrete ordinates method for two-dimensional neutron transport. *SIAM Journal on Numerical Analysis*, 26(1):66–87, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Asadzadeh:1998:FEM

[Asa98] Mohammad Asadzadeh. A finite element method for the neutron transport equation in an infinite cylindrical domain. *SIAM Journal on Numerical Analysis*, 35 (4):1299–1314, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23811`.

Ascher:1977:LPA

[Asc77] Uri Ascher. Linear programming algorithms for the Chebyshev solution to a system of consistent linear equations. *SIAM Journal on Numerical Analysis*, 14(3): 519–526, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ascher:1978:DLS

[Asc78] Uri Ascher. Discrete least squares approximations for ordinary differential equations. *SIAM Journal on Numerical Analysis*, 15(3): 478–496, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ascher:1986:CTP

[Asc86] Uri Ascher. Collocation for two-point boundary value problems revisited. *SIAM Journal on Numerical Analysis*, 23(3):596–609, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ascher:1989:NDA

[Asc89] Uri Ascher. On numerical differential algebraic problems with application to semiconductor device simulation. *SIAM Journal on Numerical Analysis*, 26(3):517–538, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Alfeld:1993:GDS

[ASW93] Peter Alfeld, Larry L. Schumaker, and Walter Whiteley. The generic dimension of the space of C^1 splines of degree $d \geq 8$ on tetrahedral decompositions. *SIAM Journal on Numerical Analysis*, 30 (3):889–920, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ahues:1986:RMN

[AT86] Mario Ahués and Mauricio Telias. Refinement methods of Newton type for approximate eigenelements of integral operators. *SIAM Journal on Numerical Analysis*, 23(1): 144–159, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ainsworth:1997:PEE

[AT97] Mark Ainsworth and J. Tinsley Oden. *A Posteriori* error estimators for the Stokes and Oseen equations. *SIAM Journal on Numerical Analysis*, 34 (1):228–245, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26409`.

Atkinson:1967:NSF

[Atk67] Kendall E. Atkinson. The numerical solution of Fredholm integral equations of the second kind. *SIAM Journal on Numerical Analysis*, 4 (3):337–348, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1968:OCN

[Atk68] Kendall E. Atkinson. On the order of convergence of natural cubic spline interpolation. *SIAM Journal on Numerical Analysis*, 5(1):89–101, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1969:NSI

[Atk69] Kendall Atkinson. The numerical solution of integral equations on the half-line. *SIAM Journal on Numerical Analysis*, 6(3):375–397, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1972:NEC

[Atk72] Kendall Atkinson. The numerical evaluation of the Cauchy transform on simple closed curves. *SIAM Journal on Numerical Analysis*, 9 (2):284–299, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1973:NEF

[Atk73] Kendall E. Atkinson. The numerical evaluation of fixed points for completely continuous operators. *SIAM Journal on Numerical Analysis*, 10(5): 799–807, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1974:NSA

[Atk74] Kendall E. Atkinson. The numerical solution of an Abel integral equation by a product trapezoidal method. *SIAM Journal on Numerical Analysis*, 11(1):97–101, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1975:CRA

[Atk75] Kendall Atkinson. Convergence rates for approximate eigenvalues of compact integral operators. *SIAM Journal on Numerical Analysis*, 12 (2):213–222, April 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1977:NSB

[Atk77] Kendall E. Atkinson. The numerical solution of a bifurcation problem. *SIAM Journal on Numerical Analysis*, 14 (4):584–599, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1982:NSL

[Atk82] K. E. Atkinson. The numerical solution of Laplace's equation in three dimensions. *SIAM Journal on Numerical Analysis*, 19(2): 263–274, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Aubin:1968:BAL

[Aub68] Jean-Pierre Aubin. Best approximation of linear operators in Hilbert spaces. *SIAM Journal on Numerical Analysis*, 5(3):518–521, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Auslaender:1971:NHT

[Aus71] G. J. Auslaender. A novel, Hermite type, interpolation procedure. *SIAM Journal on Numerical Analysis*, 8(2): 465–472, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Axelsson:1990:AMP

[AV90] O. Axelsson and P. S. Vassilevski. Algebraic multilevel preconditioning methods, II. *SIAM Journal on Numerical Analysis*, 27(6):1569–1590, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Atkinson:1993:NEL

[AV93] K. Atkinson and E. Venturino. Numerical evaluation of line integrals. *SIAM Journal on Numerical Analysis*, 30 (3):882–888, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Aubert:1997:VMI

[AV97] Gilles Aubert and Luminita Vese. A variational method in image recovery. *SIAM Journal on Numerical Analysis*, 34 (5):1948–1979, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29230`.

Arminjon:1999:CFV

[AV99] Paul Arminjon and Marie-Claude Viallon. Convergence of a finite volume extension of the Nessyahu–Tadmor scheme on unstructured grids for a two-dimensional linear hyperbolic equation. *SIAM Journal on Numerical Analysis*, 36(3):738–771, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27889`.

Allen:1989:CFD

[AVG89] E. J. Allen, H. D. Victory, Jr., and K. Ganguly. On the convergence of finite-differenced multigroup, discrete-ordinates methods for anisotropically scattering slab media. *SIAM Journal*

on *Numerical Analysis*, 26(1): 88–106, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Avila:1974:FCM

[Avi74] J. H. Avila, Jr. The feasibility of continuation methods for nonlinear equations. *SIAM Journal on Numerical Analysis*, 11(1):102–122, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Aziz:1980:NSH

[AW80] A. K. Aziz and A. Werschulz. On the numerical solution of Helmholtz's equation by the finite element method. *SIAM Journal on Numerical Analysis*, 17(5):681–686, October 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ascher:1983:CSP

[AW83] U. Ascher and R. Weiss. Collocation for singular perturbation problems. I. first order systems with constant coefficients. *SIAM Journal on Numerical Analysis*, 20(3): 537–557, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Arbogast:1995:CMF

[AW95] Todd Arbogast and Mary F. Wheeler. A characteristics-mixed finite element method for advection-dominated transport problems. *SIAM Journal on Numerical Analysis*, 32 (2):404–424, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Arbogast:1997:MFE

[AWY97] Todd Arbogast, Mary F. Wheeler, and Ivan Yotov. Mixed finite elements for elliptic problems with tensor coefficients as cell-centered finite differences. *SIAM Journal on Numerical Analysis*, 34(2):828–852, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26258`.

Arbogast:1996:NMF

[AWZ96] Todd Arbogast, Mary F. Wheeler, and Nai-Ying Zhang. A nonlinear mixed finite element method for a degenerate parabolic equation arising in flow in porous media. *SIAM Journal on Numerical Analysis*, 33(4):1669–1687, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26672`.

Axelsson:1979:PIP

[Axe79] O. Axelsson. Preconditioning of indefinite problems by regularization. *SIAM Journal*

on *Numerical Analysis*, 16(1): 58–69, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1976:ACF

[BA76] I. Babuška and A. K. Aziz. On the angle condition in the finite element method. *SIAM Journal on Numerical Analysis*, 13(2):214–226, April 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1971:RCF

[Bab71] Ivo Babuška. The rate of convergence for the finite element method. *SIAM Journal on Numerical Analysis*, 8 (2):304–315, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1972:NSP

[Bab72] Ivo Babuška. Numerical stability in problems of linear algebra. *SIAM Journal on Numerical Analysis*, 9(1): 53–77, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Backus:1980:TAC

[Bac80] George E. Backus. The topping algorithm for calculating extrema of polynomials on subsets of R^n. *SIAM Journal on Numerical Analysis*, 17(4): 479–511, August 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Badea:1991:SAM

[Bad91] Lori Badea. On the Schwarz alternating method with more than two subdomains for nonlinear monotone problems. *SIAM Journal on Numerical Analysis*, 28(1):179–204, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baines:1991:AMF

[Bai91] M. J. Baines. An analysis of the moving finite-element procedure. *SIAM Journal on Numerical Analysis*, 28(5):1323–1349, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baker:1968:NCQ

[Bak68] Christopher T. H. Baker. On the nature of certain quadrature formulas and their errors. *SIAM Journal on Numerical Analysis*, 5(4):783–804, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baker:1971:DAL

[Bak71] Christopher T. H. Baker. The deferred approach to the limit for eigenvalues of integral equations. *SIAM Jour-*

nal on Numerical Analysis, 8 (1):1–10, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baker:1976:EEF

[Bak76] Garth A. Baker. Error estimates for finite element methods for second order hyperbolic equations. *SIAM Journal on Numerical Analysis*, 13 (4):564–576, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bakker:1980:NSP

[Bak80] Miente Bakker. On the numerical solution of parabolic equations in a single space variable by the continuous time Galerkin method. *SIAM Journal on Numerical Analysis*, 17(1):162–177, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bakker:1982:GME

[Bak82] Miente Bakker. Galerkin methods for even-order parabolic equations in one space variable. *SIAM Journal on Numerical Analysis*, 19(3): 571–587, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bakker:1984:ODG

[Bak84] Miente Bakker. One-dimensional Galerkin methods and superconvergence at interior nodal points. *SIAM Journal on Numerical Analysis*, 21(1):101–110, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bales:1986:HOS

[Bal86] Laurence A. Bales. Higher order single step fully discrete approximations for second order hyperbolic equations with time dependent coefficients. *SIAM Journal on Numerical Analysis*, 23(1):27–43, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bank:1977:MAEb

[Ban77] Randolph E. Bank. Marching algorithms for elliptic boundary value problems. II: The variable coefficient case. *SIAM Journal on Numerical Analysis*, 14(5):950–970, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bank:1981:CTM

[Ban81] Randolph E. Bank. A comparison of two multilevel iterative methods for nonsymmetric and indefinite elliptic finite element equations. *SIAM Journal on Numerical Analysis*, 18(4): 724–743, August 1981. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Bank:1982:AMI

[Ban82] Randolph E. Bank. Analysis of a multilevel inverse iteration procedure for eigenvalue problems. *SIAM Journal on Numerical Analysis*, 19(5):886–898, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bandle:1983:SND

[Ban83] Catherine Bandle. Solutions of a nonlinear Dirichlet problem for nearly circular domains. *SIAM Journal on Numerical Analysis*, 20(6):1094–1098, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bao:1995:FEA

[Bao95] Gang Bao. Finite element approximation of time harmonic waves in periodic structures. *SIAM Journal on Numerical Analysis*, 32(4):1155–1169, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barnhill:1965:CQC

[Bar65] Robert E. Barnhill. The convergence of quadratures on complex contours. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2): 321–336, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Barnhill:1967:OQ

[Bar67a] Robert E. Barnhill. Optimal quadratures in $L^2(E_\rho)$. I. *SIAM Journal on Numerical Analysis*, 4(3):390–397, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barnhill:1967:OQI

[Bar67b] Robert E. Barnhill. Optimal quadratures in $L^2(E_\rho)$. II. *SIAM Journal on Numerical Analysis*, 4(4):534–541, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barnhill:1969:CCC

[Bar69] Robert E. Barnhill. The convergence of complex cubatures. *SIAM Journal on Numerical Analysis*, 6(1): 82–89, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bard:1970:CGM

[Bar70] Yonathan Bard. Comparison of gradient methods for the solution of nonlinear parameter estimation problems. *SIAM Journal on Numerical Analysis*, 7(1):157–186, March 1970. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Barrodale:1973:BRA

[Bar73] Ian Barrodale. Best rational approximation and strict quasi-convexity. *SIAM Journal on Numerical Analysis*, 10 (1):8–12, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barlow:1988:EAI

[Bar88] Jesse L. Barlow. Error analysis and implementation aspects of deferred correction for equality constrained least squares problems. *SIAM Journal on Numerical Analysis*, 25(6):1340–1358, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barrio:1999:SRK

[Bar99] Roberto Barrio. On the A-stability of Runge–Kutta collocation methods based on orthogonal polynomials. *SIAM Journal on Numerical Analysis*, 36(4):1291–1303, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32098`.

Basu:1973:ERF

[Bas73a] N. K. Basu. Errors in the representation of a function by Chebyshev polynomials of the second kind. *SIAM Journal on Numerical Analysis*, 10 (3):485–488, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Basu:1973:DCS

[Bas73b] N. K. Basu. On double Chebyshev series approximation. *SIAM Journal on Numerical Analysis*, 10(3):496–505, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Basso:1982:IML

[Bas82] Patricio Basso. Iterative methods for the localization of the global maximum. *SIAM Journal on Numerical Analysis*, 19(4):781–792, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Basso:1985:OSG

[Bas85] Patricio Basso. Optimal search for the global maximum of functions with bounded seminorm. *SIAM Journal on Numerical Analysis*, 22(5):888–903, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bauer:1974:CGR

[Bau74] F. L. Bauer. Computational graphs and rounding error. *SIAM Journal on Numerical*

Analysis, 11(1):87–96, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). In memoriam George Forsythe.

Bjorck:1971:IAC

[BB71] Å. Björck and C. Bowie. An iterative algorithm for computing the best estimate of an orthogonal matrix. *SIAM Journal on Numerical Analysis*, 8(2):358–364, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bracha-Barak:1974:FPS

[BB74] Amnon Bracha-Barak. A factorization procedure for the solution of multidimensional ellipti partial differential equations. *SIAM Journal on Numerical Analysis*, 11(5): 887–893, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Burrage:1979:SCI

[BB79] Kevin Burrage and J. C. Butcher. Stability criteria for implicit Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 16(1):46–57, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beauwens:1987:SBF

[BB87] R. Beauwens and M. Ben Bouzid. On sparse block factorization iterative methods. *SIAM Journal on Numerical Analysis*, 24(5):1066–1076, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beauwens:1988:ECP

[BB88] Robert Beauwens and Mustapha Ben Bouzid. Existence and conditioning properties of sparse approximate block factorizations. *SIAM Journal on Numerical Analysis*, 25(4): 941–956, August 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bonnet-Bendhia:1995:SAB

[BBG95] Anne-Sophie Bonnet-Bendhia and Nabil Gmati. Spectral approximation of a boundary condition for an eigenvalue problem. *SIAM Journal on Numerical Analysis*, 32(4): 1263–1279, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bracha-Barak:1973:SFP

[BBS73] Amnon Bracha-Barak and Paul E. Saylor. A symmetric factorization procedure for the solution of elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 10(1):190–206, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barzilai:1982:NII

[BBT82] J. Barzilai and A. Ben-Tal. Nonpolynomial and inverse interpolation for line search: synthesis and convergence rates. *SIAM Journal on Numerical Analysis*, 19(6):1263–1277, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Byrne:1972:LMF

[BC72] George D. Byrne and Donald N. H. Chi. Linear multistep formulas based on g-splines. *SIAM Journal on Numerical Analysis*, 9(2):316–324, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Burkowski:1973:NDP

[BC73] F. J. Burkowski and D. D. Cowan. The numerical derivation of a periodic solution of a second order differential difference equation. *SIAM Journal on Numerical Analysis*, 10 (3):489–495, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Burrage:1989:CSD

[BC89] Kevin Burrage and Fred Chipman. Construction of A-stable diagonally implicit multivalue methods. *SIAM Journal on Numerical Analysis*, 26(2):397–413, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Butcher:1990:TER

[BC90] J. C. Butcher and J. R. Cash. Towards efficient Runge–Kutta methods for stiff systems. *SIAM Journal on Numerical Analysis*, 27 (3):753–761, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bialecki:1994:NEB

[BC94a] Bernard Bialecki and Xiao-Chuan Cai. H^1-norm error bounds for piecewise Hermite bicubic orthogonal spline collocation schemes for elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 31(4):1128–1146, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brighi:1994:ACE

[BC94b] Bernard Brighi and Michel Chipot. Approximated convex envelope of a function. *SIAM Journal on Numerical Analysis*, 31(1):128–148, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Berger:1995:NSO

[BC95a] Fabienne Berger and Jean-François Colombeau. Numerical solutions of one-pressure models in multifluid flows. *SIAM Journal on Numerical Analysis*, 32(4):1139–1154, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenier:1995:CPM

[BC95b] Y. Brenier and G.-H. Cottet. Convergence of particle methods with random rezoning for the two-dimensional Euler and Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 32(4):1080–1097, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Buet:1999:NAC

[BC99] C. Buet and S. Cordier. Numerical analysis of conservative and entropy schemes for the Fokker–Planck–Landau equation. *SIAM Journal on Numerical Analysis*, 36(3): 953–973, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32210`.

Bartels:1978:CDM

[BCC78] Richard H. Bartels, Andrew R. Conn, and Christakis Charalambous. On Cline's direct method for solving overdetermined linear systems in the l_∞ sense. *SIAM Journal on Numerical Analysis*, 15(2):255–270, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bartels:1989:EPM

[BCL89a] Richard H. Bartels, Andrew R. Conn, and Yuying Li. Erratum: "Primal methods are better than dual methods for solving overdetermined linear systems in the L_∞ sense?" [SIAM J. Numer. Anal. **26** (1989), no. 3, 693–726]. *SIAM Journal on Numerical Analysis*, 26(5): 1266, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [BCL89b].

Bartels:1989:PMB

[BCL89b] Richard H. Bartels, Andrew R. Conn, and Yuying Li. Primal methods are better than dual methods for solving overdetermined linear systems in the L_∞ sense. *SIAM Journal on Numerical Analysis*, 26(3):693–726, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See erratum [BCL89a].

Bernardi:1988:GIS

[BCM88] Christine Bernardi, Claudio Canuto, and Yvon Maday. Generalized inf-sup conditions for Chebyshev spectral approximation of the Stokes problem. *SIAM Journal on Numerical Analysis*, 25(6):

1237–1271, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bernardi:1991:SAS

[BCM91] Christine Bernardi, Claudio Canuto, and Yvon Maday. Spectral approximations of the Stokes equations with boundary conditions on the pressure. *SIAM Journal on Numerical Analysis*, 28(2): 333–362, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Burrage:1994:ORM

[BCM94] K. Burrage, F. H. Chipman, and P. H. Muir. Order results for mono-implicit Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 31 (3):876–891, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bochev:1998:AVF

[BCMM98] P. Bochev, Z. Cai, T. A. Manteuffel, and S. F. McCormick. Analysis of velocity-flux first-order system least-squares principles for the Navier–Stokes equations: Part I. *SIAM Journal on Numerical Analysis*, 35(3):990–1009, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31359`.

Babuska:1991:EPV

[BCMP91] I. Babuška, A. Craig, J. Mandel, and J. Pitkäranta. Efficient preconditioning for the p-version finite element method in two dimensions. *SIAM Journal on Numerical Analysis*, 28(3):624–661, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1994:SFE

[BCO94] Ivo Babuška, Gabriel Caloz, and John E. Osborn. Special finite element methods for a class of second order elliptic problems with rough coefficients. *SIAM Journal on Numerical Analysis*, 31(4): 945–981, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Berger:1975:NSD

[BCR75] Alan E. Berger, Melvyn Ciment, and Joel C. W. Rogers. Numerical solution of a diffusion consumption problem with a free boundary. *SIAM Journal on Numerical Analysis*, 12(4):646–672, September 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bartels:1978:MTP

[BCS78] Richard H. Bartels, Andrew R. Conn, and James W.

Sinclair. Minimization techniques for piecewise differentiable functions: The l_1 solution to an overdetermined linear system. *SIAM Journal on Numerical Analysis*, 15 (2):224–241, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Benharbit:1995:NVC

[BCV95] S. Benharbit, A. Chalabi, and J. P. Vila. Numerical viscosity and convergence of finite volume methods for conservation laws with boundary conditions. *SIAM Journal on Numerical Analysis*, 32 (3):775–796, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Buzbee:1974:DSB

[BD74] B. L. Buzbee and Fred W. Dorr. The direct solution of the biharmonic equation on rectangular regions and the Poisson equation on irregular regions. *SIAM Journal on Numerical Analysis*, 11 (4):753–763, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baker:1976:EQE

[BD76] Garth A. Baker and Vassilios A. Dougalis. The effect of quadrature errors on finite element approximations for second order hyperbolic equations. *SIAM Journal on Numerical Analysis*, 13(4):577–598, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bank:1985:SEM

[BD85] Randolph E. Bank and Craig C. Douglas. Sharp estimates for multigrid rates of convergence with general smoothing and acceleration. *SIAM Journal on Numerical Analysis*, 22(4): 617–633, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barlow:1990:CAE

[BD90] Jesse Barlow and James Demmel. Computing accurate eigensystems of scaled diagonally dominant matrices. *SIAM Journal on Numerical Analysis*, 27(3):762–791, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Boue:1999:MCA

[BD99] Michelle Boué and Paul Dupuis. Markov chain approximations for deterministic control problems with affine dynamics and quadratic cost in the control. *SIAM Journal on Numerical Analysis*, 36(3):667–695, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http:/`

/epubs.siam.org/sam-bin/dbq/article/32352.

Brezinski:1983:CAE

[BDGB83] C. Brezinski, J. P. Delahaye, and B. Germain-Bonne. Convergence acceleration by extraction of linear subsequences. *SIAM Journal on Numerical Analysis*, 20(6): 1099–1105, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Buzbee:1971:DSD

[BDGG71] B. L. Buzbee, F. W. Dorr, J. A. George, and G. H. Golub. The direct solution of the discrete Poisson equation on irregular regions. *SIAM Journal on Numerical Analysis*, 8(4):722–736, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barucq:1998:MAB

[BDH98] H. Barucq, F. Delaurens, and B. Hanouzet. Method of absorbing boundary conditions: Phenomena of error stabilization. *SIAM Journal on Numerical Analysis*, 35(3):1113–1129, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/29780.

Bourlard:1992:CSE

[BDLN92] Maryse Bourlard, Monique Dauge, Mbaro-Saman Lubuma, and Serge Nicaise. Coefficients of the singularities for elliptic boundary value problems on domains with conical points III. finite element methods on polygonal domains. *SIAM Journal on Numerical Analysis*, 29(1):136–155, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bermudez:1995:FEV

[BDM+95] A. Bermúdez, R. Durán, M. A. Muschietti, R. Rodríguez, and J. Solomin. Finite element vibration analysis of fluid-solid systems without spurious modes. *SIAM Journal on Numerical Analysis*, 32 (4):1280–1295, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1992:AEP

[BDR92] Ivo Babuška, Ricardo Durán, and Rodolfo Rodríguez. Analysis of the efficiency of an A posteriori error estimator for linear triangular finite elements. *SIAM Journal on Numerical Analysis*, 29(4):947–964, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Birkhoff:1966:RRA

[BDSW66] G. Birkhoff, C. De Boor, B. Swartz, and B. Wendroff. Rayleigh–Ritz approximation by piecewise cubic polynomials. *SIAM Journal on Numerical Analysis*, 3(2): 188–203, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brady:1979:SRP

[BE79] Stephen W. Brady and Alan R. Elcrat. Some results on a posteriori error estimation for approximate solutions of second order elliptic problems. *SIAM Journal on Numerical Analysis*, 16(6):877–889, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Berntsen:1988:CHD

[BE88] Jarle Berntsen and Terje O. Espelid. On the construction of higher degree three-dimensional embedded integration rules. *SIAM Journal on Numerical Analysis*, 25(1): 222–234, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beauwens:1976:SDD

[Bea76] Robert Beauwens. Semistrict diagonal dominance. *SIAM Journal on Numerical Analysis*, 13(1):109–112, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beatson:1982:MCA

[Bea82a] R. K. Beatson. Monotone and convex approximation by splines: error estimates and a curve fitting algorithm. *SIAM Journal on Numerical Analysis*, 19(6):1278–1285, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beatson:1982:RRA

[Bea82b] R. K. Beatson. Restricted range approximation by splines and variational inequalities. *SIAM Journal on Numerical Analysis*, 19(2):372–380, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beatson:1986:CSC

[Bea86] R. K. Beatson. On the convergence of some cubic spline interpolation schemes. *SIAM Journal on Numerical Analysis*, 23(4):903–912, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beattie:1987:EAR

[Bea87] Christopher Beattie. An extension of Aronszajn's rule: slicing the spectrum for intermediate problems. *SIAM Journal on Numerical Analysis*, 24(4):828–843, August

1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beckers:1992:ALN

[Bec92] J. M. Beckers. Analytical linear numerical stability conditions for an anisotropic three-dimensional advection-diffusion equation. *SIAM Journal on Numerical Analysis*, 29(3):701–713, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bornemann:1996:PEE

[BEK96] Folkmar A. Bornemann, Bodo Erdmann, and Ralf Kornhuber. *A Posteriori* error estimates for elliptic problems in two and three space dimensions. *SIAM Journal on Numerical Analysis*, 33(3): 1188–1204, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Belford:1969:IVP

[Bel69] Geneva G. Belford. An initial value problem approach to the solution of eigenvalue problems. *SIAM Journal on Numerical Analysis*, 6(1): 99–103, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bramble:1989:ADM

[BEL89] James H. Bramble, Richard E. Ewing, and Gang Li. Alternating direction multistep methods for parabolic problems — iterative stabilization. *SIAM Journal on Numerical Analysis*, 26(4):904–919, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Belhachmi:1997:NME

[Bel97] Zakaria Belhachmi. Nonconforming mortar element methods for the spectral discretization of two-dimensional fourth-order problems. *SIAM Journal on Numerical Analysis*, 34(4):1545–1573, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28436`.

Bendhia:1992:NAB

[Ben92] Hachmi Bendhia. Numerical analysis of a bidimensional hencky problem approximated by a discontinuous finite element method. *SIAM Journal on Numerical Analysis*, 29(4):1059–1073, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Benamou:1995:DDM

[Ben95] J.-D. Benamou. A domain decomposition method for the polar factorization of vector-valued mappings. *SIAM*

Journal on Numerical Analysis, 32(6):1808–1838, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Benamou:1996:DDM

[Ben96] Jean-David Benamou. A domain decomposition method with coupled transmission conditions for the optimal control of systems governed by elliptic partial differential equations. *SIAM Journal on Numerical Analysis*, 33(6): 2401–2416, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26710`.

Berman:1966:MSA

[Ber66] Gerald Berman. Minimization by successive approximation. *SIAM Journal on Numerical Analysis*, 3(1):123–133, March 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bernardi:1982:NAP

[Ber82] Christine Bernardi. Numerical approximation of a periodic linear parabolic problem. *SIAM Journal on Numerical Analysis*, 19(6):1196–1207, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Berger:1986:CUA

[Ber86] Alan E. Berger. A conservative uniformly accurate difference method for a singular perturbation problem in conservation form. *SIAM Journal on Numerical Analysis*, 23(6):1241–1253, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Berger:1987:CGI

[Ber87] Marsha J. Berger. On conservation at grid interfaces. *SIAM Journal on Numerical Analysis*, 24(5):967–984, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). ICASE Report No. 84-43, September, 1984.

Bernardi:1989:OFE

[Ber89] Christine Bernardi. Optimal finite-element interpolation on curved domains. *SIAM Journal on Numerical Analysis*, 26(5):1212–1240, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bermejo:1995:GCA

[Ber95] Rodolfo Bermejo. A Galerkin-characteristic algorithm for transport-diffusion equations. *SIAM Journal on Numerical Analysis*, 32(2):425–454, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beyn:1987:NAP

[Bey87] W.-J. Beyn. On the numerical approximation of phase portraits near stationary points. *SIAM Journal on Numerical Analysis*, 24(5):1095–1113, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beylkin:1992:ROB

[Bey92] G. Beylkin. On the representation of operators in bases of compactly supported wavelets. *SIAM Journal on Numerical Analysis*, 29(6): 1716–1740, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beaudet:1975:UBC

[BF75] P. Beaudet and T. Feagin. The use of back corrections in multistep methods of numerical integration. *SIAM Journal on Numerical Analysis*, 12(6):895–918, December 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baumgardner:1985:IDT

[BF85] John R. Baumgardner and Paul O. Frederickson. Icosahedral discretization of the two-sphere. *SIAM Journal on Numerical Analysis*, 22(6): 1107–1115, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brezzi:1991:SHO

[BF91] Franco Brezzi and Richard S. Falk. Stability of higher-order hood-taylor methods. *SIAM Journal on Numerical Analysis*, 28(3):581–590, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bialecki:1999:OSC

[BF99] Bernard Bialecki and Ryan I. Fernandes. An orthogonal spline collocation alternating direction implicit Crank–Nicolson method for linear parabolic problems on rectangles. *SIAM Journal on Numerical Analysis*, 36(5): 1414–1434, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31038`.

Bialecki:1992:FDS

[BFB92] Bernard Bialecki, Graeme Fairweather, and Karin R. Bennett. Fast direct solvers for piecewise Hermite bicubic orthogonal spline collocation equations. *SIAM Journal on Numerical Analysis*, 29(1): 156–173, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Boffi:1999:CME

[BFGP99] D. Boffi, P. Fernandes, L. Gastaldi, and I. Perugia. Computational models of electromagnetic resonators: Analysis of edge element approximation. *SIAM Journal on Numerical Analysis*, 36 (4):1264–1290, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/31853.

Bernstein:1996:FOE

[BFO96] Barry Bernstein, Kathleen A. Feigl, and Elwood T. Olsen. A first-order exactly incompressible finite element for axisymmetric fluid flow. *SIAM Journal on Numerical Analysis*, 33(5):1736–1758, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/24309.

Bacopoulos:1971:RPM

[BG71] A. Bacopoulos and B. Gaff. On the reduction of a problem of minimization of $n+1$ variables to a problem of one variable. *SIAM Journal on Numerical Analysis*, 8(1): 97–103, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Birkhoff:1974:OFP

[BG74] Garrett Birkhoff and Surender Gulati. Optimal few-point discretizations of linear source problems. *SIAM Journal on Numerical Analysis*, 11(4):700–728, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1988:VFE

[BG88] I. Babuška and B. Q. Guo. The *h*-*p* version of the finite element method for domains with curved boundaries. *SIAM Journal on Numerical Analysis*, 25(4):837–861, August 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barles:1995:SPC

[BG95] Guy Barles and Christine Georgelin. A simple proof of convergence for an approximation scheme for computing motions by mean curvature. *SIAM Journal on Numerical Analysis*, 32(2): 484–500, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bernardi:1998:LRO

[BG98a] C. Bernardi and V. Girault. A local regularization operator for triangular and quadrilateral finite elements. *SIAM Journal on Numerical Analysis*, 35(5): 1893–1916, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http:/

/epubs.siam.org/sam-bin/dbq/article/29376.

Brenier:1998:SPS

[BG98b] Yann Brenier and Emmanuel Grenier. Sticky particles and scalar conservation laws. *SIAM Journal on Numerical Analysis*, 35(6):2317–2328, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/31735.

Bamberger:1988:NDU

[BGJ88] A. Bamberger, J. C. Guillot, and P. Joly. Numerical diffraction by a uniform grid. *SIAM Journal on Numerical Analysis*, 25(4):753–783, August 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bahi:1996:PTC

[BGM96] J. Bahi, E. Griepentrog, and J. C. Miellou. Parallel treatment of a class of differential-algebraic systems. *SIAM Journal on Numerical Analysis*, 33(5):1969–1980, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/25810.

Buzbee:1970:DMS

[BGN70] B. L. Buzbee, G. H. Golub, and C. W. Nielson. On direct methods for solving Poisson's equations. *SIAM Journal on Numerical Analysis*, 7(4):627–656, December 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1989:RNS

[BGO89] I. Babuška, B. Q. Guo, and J. E. Osborn. Regularity and numerical solution of eigenvalue problems with piecewise analytic data. *SIAM Journal on Numerical Analysis*, 26(6):1534–1560, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bultelle:1998:UGD

[BGS98] Matthieu Bultelle, Magali Grassin, and Denis Serre. Unstable Godunov discrete profiles for steady shock waves. *SIAM Journal on Numerical Analysis*, 35(6):2272–2297, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/31228.

Bamberger:1997:DDM

[BGT97] Alain Bamberger, Roland Glowinski, and Quang Huy Tran. A domain decomposition method for the acoustic wave equation with discontinuous coefficients and grid change. *SIAM Journal on Numerical Analysis*, 34(2):603–639, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26151`.

Bramble:1965:FDA

[BH65] J. H. Bramble and B. E. Hubbard. A finite difference analog of the Neumann problem for Poisson's equation. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):1–14, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Bramble:1968:EBR

[BH68] J. H. Bramble and B. E. Hubbard. Effects of boundary regularity on the discretization error in the fixed membrane eigenvalue problem. *SIAM Journal on Numerical Analysis*, 5(4):835–863, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bramble:1970:ELF

[BH70] J. H. Bramble and S. R. Hilbert. Estimation of linear functionals on Sobolev spaces with application to Fourier transforms and spline interpolation. *SIAM Journal on Numerical Analysis*, 7(1):112–124, March 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baker:1971:AEI

[BH71] Christopher T. H. Baker and Graham S. Hodgson. Asymptotic expansions for integration formulas in one or more dimensions. *SIAM Journal on Numerical Analysis*, 8(2):473–480, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brown:1975:BCC

[BH75] J. A. Brown and M. S. Henry. Best Chebyshev composite approximation. *SIAM Journal on Numerical Analysis*, 12(3):336–344, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Braess:1983:NCP

[BH83] D. Braess and W. Hackbusch. A new convergence proof for the multigrid method including the V-cycle. *SIAM Journal on Numerical Analysis*, 20(5):967–975, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brown:1986:MFM

[BH86] Peter N. Brown and Alan C. Hindmarsh. Matrix-free methods for stiff systems of

ODE's. *SIAM Journal on Numerical Analysis*, 23(3): 610–638, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brasey:1993:HER

[BH93] V. Brasey and E. Hairer. Half-explicit Runge–Kutta methods for differential-algebraic systems of index 2. *SIAM Journal on Numerical Analysis*, 30(2):538–552, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beale:1996:CBI

[BHL96] J. Thomas Beale, Thomas Y. Hou, and John Lowengrub. Convergence of a boundary integral method for water waves. *SIAM Journal on Numerical Analysis*, 33 (5):1797–1843, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24575`.

Brezzi:1999:PEA

[BHM+99] F. Brezzi, T. J. R. Hughes, L. D. Marini, A. Russo, and E. Süli. A priori error analysis of residual-free bubbles for advection-diffusion problems. *SIAM Journal on Numerical Analysis*, 36(6): 1933–1948, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34236`.

Bramble:1968:DAD

[BHZ68] J. H. Bramble, B. E. Hubbard, and M. Zlamal. Discrete analogues of the Dirichlet problem with isolated singularities. *SIAM Journal on Numerical Analysis*, 5(1): 1–25, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ben-Israel:1966:EBG

[BI66] Adi Ben-Israel. On error bounds for generalized inverses. *SIAM Journal on Numerical Analysis*, 3(4):585–592, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babovsky:1989:CPN

[BI89] Hans Babovsky and Reinhard Illner. A convergence proof for Nanbu's simulation method for the full Boltzmann equation. *SIAM Journal on Numerical Analysis*, 26(1):45–65, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bialecki:1989:SNM

[Bia89] Bernard Bialecki. Sinc-Nyström method for numerical solution of a dominant system of Cauchy singular integral equations given on a piecewise smooth contour. *SIAM Journal on Numerical Analysis*, 26(5):1194–1211, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bialecki:1993:FDD

[Bia93] Bernard Bialecki. A fast domain decomposition Poisson solver on a rectangle for Hermite bicubic orthogonal spline collocation. *SIAM Journal on Numerical Analysis*, 30(2): 425–434, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bialecki:1998:CAO

[Bia98] Bernard Bialecki. Convergence analysis of orthogonal spline collocation for elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 35(2): 617–631, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30540`.

Ben-Israel:1966:ICG

[BIC66] Adi Ben-Israel and Dan Cohen. On iterative computation of generalized inverses and associated projections. *SIAM Journal on Numerical Analysis*, 3(3):410–419, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bickart:1977:ESP

[Bic77] Theodore A. Bickart. An efficient solution process for implicit Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 14(6):1022–1027, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Birkhoff:1983:SPH

[Bir83] Garrett Birkhoff. Salutation to Peter Henrici on his 60th birthday: September 13, 1983. *SIAM Journal on Numerical Analysis*, 20(6):??, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `https://www.jstor.org/stable/pdf/2157141.pdf`. Volume 20(6) is dedicated to Peter Henrici.

Brenier:1991:UDM

[BJ91] Yann Brenier and Jérôme Jaffré. Upstream differencing for multiphase flow in reservoir simulation. *SIAM Journal on Numerical Analysis*, 28 (3):685–696, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Berthold:1993:NEB

[BJ93] Dietmar Berthold and Peter Junghanns. New error bounds for the quadrature method for the solution of Cauchy singular integral equations. *SIAM Journal on Numerical Analysis*, 30(5):1351–1372, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Butcher:1997:IDI

[BJ97] J. C. Butcher and Z. Jackiewicz. Implementation of diagonally implicit multistage integration methods for ordinary differential equations. *SIAM Journal on Numerical Analysis*, 34(6): 2119–2141, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28250`.

Baker:1990:PSV

[BJK90] Garth A. Baker, Wadi N. Jureidini, and Ohannes A. Karakashian. Piecewise solenoidal vector fields and the Stokes problem. *SIAM Journal on Numerical Analysis*, 27(6):1466–1485, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bosarge:1973:RGP

[BJMT73] W. E. Bosarge, Jr., O. G. Johnson, R. S. McKnight, and W. P. Timlake. The Ritz–Galerkin procedure for nonlinear control problems. *SIAM Journal on Numerical Analysis*, 10(1):94–111, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Burley:1981:VOP

[BJN81] S. K. Burley, S. O. John, and J. Nuttall. Vector orthogonal polynomials. *SIAM Journal on Numerical Analysis*, 18(5): 919–924, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bjorstad:1983:FNS

[Bjø83] Petter Bjørstad. Fast numerical solution of the biharmonic Dirichlet problem on rectangles. *SIAM Journal on Numerical Analysis*, 20(1): 59–71, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bamberger:1990:SOA

[BJR90] Alain Bamberger, Patrick Joly, and Jean E. Roberts. Second-order absorbing boundary conditions for the wave equation: A solution for the corner problem. *SIAM Journal on Numerical Analysis*, 27 (2):323–352, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bosarge:1973:DMA

[BJS73] W. E. Bosarge, Jr., O. G. Johnson, and C. L. Smith. A direct method approximation to the linear parabolic regulator problem over multivariate spline bases. *SIAM Journal on Numerical Analysis*, 10 (1):35–49, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bellen:1994:CWR

[BJZ94] A. Bellen, Z. Jackiewicz, and M. Zennaro. Contractivity of waveform relaxation Runge–Kutta iterations and related limit methods for dissipative systems in the maximum norm. *SIAM Journal on Numerical Analysis*, 31(2): 499–523, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Banks:1973:CEV

[BK73] D. O. Banks and G. J. Kurowski. Computation of eigenvalues for vibrating beams by use of a prufer transformation. *SIAM Journal on Numerical Analysis*, 10(5):918–932, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1975:NEE

[BK75] I. Babuška and R. B. Kellogg. Nonuniform error estimates for the finite element method. *SIAM Journal on Numerical Analysis*, 12 (6):868–875, December 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brabston:1977:NMS

[BK77] D. C. Brabston and H. B. Keller. A numerical method for singular two point boundary value problems. *SIAM Journal on Numerical Analysis*, 14(5):779–791, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baker:1978:SRN

[BK78] Christopher T. H. Baker and Malcolm S. Keech. Stability regions in the numerical treatment of Volterra integral equations. *SIAM Journal on Numerical Analysis*, 15 (2):394–417, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barrett:1997:FEAa

[BK97a] John W. Barrett and Peter Knabner. Finite element approximation of the transport of reactive solutes in porous media. Part 1: Error estimates for nonequilibrium adsorption processes. *SIAM Journal on Numerical Analysis*, 34(1):201–227, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24902`.

Barrett:1997:FEAb

[BK97b] John W. Barrett and Peter Knabner. Finite element approximation of the transport of reactive solutes in porous media. Part II: Error estimates for equilibrium adsorption processes. *SIAM Journal on Numerical Analysis*, 34(2):455–479, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25819`.

Beyn:1997:NCH

[BK97c] W.-J. Beyn and J.-M. Kleinkauf. The numerical computation of homoclinic orbits for maps. *SIAM Journal on Numerical Analysis*, 34 (3):1207–1236, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28169`.

Barrett:1998:IEB

[BK98] John W. Barrett and Peter Knabner. An improved error bound for a Lagrange–Galerkin method for contaminant transport with non-lipschitzian adsorption kinetics. *SIAM Journal on Numerical Analysis*, 35(5): 1862–1882, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30151`.

Bernardi:1999:SED

[BK99] C. Bernardi and A. Karageorghis. Spectral element discretization of the circular driven cavity, Part I: The Laplace equation. *SIAM Journal on Numerical Analysis*, 36(5):1435–1465, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32379`.

Bramble:1994:UCM

[BKP94] James H. Bramble, Do Y. Kwak, and Joseph E. Pasciak. Uniform convergence of multigrid V-Cycle iterations for indefinite and nonsymmetric problems. *SIAM Journal on Numerical Analysis*, 31(6):1746–1763, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barrar:1980:FTA

[BL80] R. B. Barrar and H. L. Loeb. Fundamental theorem of algebra for monosplines and related results. *SIAM Journal on Numerical Analysis*, 17 (6):874–882, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bowers:1987:NSS

[BL87] Kenneth L. Bowers and John Lund. Numerical solution of singular Poisson problems via the sinc-Galerkin method. *SIAM Journal on Numerical Analysis*, 24(1):36–51, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beyer:1992:AOD

[BL92] R. P. Beyer and R. J. Leveque. Analysis of a one-dimensional model for the immersed boundary method. *SIAM Journal on Numerical Analysis*, 29(2):332–364, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barrett:1994:FEA

[BL94] John W. Barrett and W. B. Liu. Finite element approximation of the parabolic p-Laplacian. *SIAM Journal on Numerical Analysis*, 31(2):413–428, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Berger:1998:AMR

[BL98] Marsha J. Berger and Randall J. LeVeque. Adaptive mesh refinement using wave-propagation algorithms for hyperbolic systems. *SIAM Journal on Numerical Analysis*, 35(6):2298–2316, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31597`.

Bernardi:1992:FEA

[BLMPT92] Christine Bernardi, Frédéric Laval, Brigitte Métivet, and Bernadette Pernaud-Thomas. Finite element approximation of viscous flows with varying density. *SIAM Journal on Numerical Analysis*, 29(5):1203–1243, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1987:FMN

[BM87] I. Babuška and V. Majer. The factorization method for the numerical solution of two-point boundary value problems for linear ODEs. *SIAM Journal on Numerical Analysis*, 24(6):1301–1334, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Burke:1988:IAC

[BM88] James V. Burke and Jorge J. Moré. On the identification of active constraints. *SIAM Journal on Numerical Analysis*, 25(5):1197–1211, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bernardi:1989:PSW

[BM89] Christine Bernardi and Yvon Maday. Properties of some weighted Sobolev spaces and application to spectral approximations. *SIAM Journal on Numerical Analysis*, 26(4): 769–829, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Balla:1996:TBC

[BM96] Katalin Balla and Roswitha März. Transfer of boundary conditions for DAEs of index 1. *SIAM Journal on Numerical Analysis*, 33(6): 2318–2332, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24234`.

Burie:1997:MMS

[BM97] J. B. Burie and M. Marion. Multilevel methods in space and time for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 34 (4):1574–1599, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26798`.

Belgacem:1999:CSF

[BM99] Faker Ben Belgacem and Yvon Maday. Coupling spectral and finite elements for second order elliptic three-dimensional equations. *SIAM Journal on Numerical Analysis*, 36(4):1234–1263, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31919`.

Bochev:1999:AVF

[BMM99] Pavel Bochev, Thomas A. Manteuffel, and Stephen F. McCormick. Analysis of velocity-flux least-squares principles for the Navier–Stokes equations: Part II. *SIAM Journal on Numerical Analysis*, 36(4):1125–1144, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32497`.

Brezzi:1989:TDE

[BMP89] Franco Brezzi, Luisa Donatella Marini, and Paola Pietra. Two-dimensional exponential fitting and applications to drift-diffusion models. *SIAM Journal on Numerical Analysis*, 26(6):1342–1355, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baker:1979:RSN

[BMS79] Christopher T. H. Baker, Athena Makroglou, and Edward Short. Regions of stability in the numerical treatment of Volterra integro-differential equations. *SIAM Journal on Numerical Analysis*, 16 (6):890–910, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bramble:1973:GRL

[BN73] James H. Bramble and Joachim A. Nitsche. A generalized ritz-least-squares method for Dirichlet problems. *SIAM Journal on Numerical Analysis*, 10(1): 81–93, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barnhill:1974:RKF

[BN74] Robert E. Barnhill and Gregory M. Nielson. Reproducing kernel functions for Sard spaces of type B. *SIAM Journal on Numerical Analysis*, 11 (1):37–44, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Berman:1976:CS

[BN76] Abraham Berman and Michael Neumann. Consistency and splittings. *SIAM Journal on Numerical Analysis*, 13 (6):877–888, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Boland:1983:SFE

[BN83] J. M. Boland and R. A. Nicolaides. Stability of finite elements under divergence constraints. *SIAM Journal on Numerical Analysis*, 20(4): 722–731, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Boland:1985:SSL

[BN85] J. M. Boland and R. A. Nicolaides. Stable and semistable low order finite elements for viscous flows. *SIAM Journal on Numerical Analysis*, 22 (3):474–492, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Byrd:1989:TAQ

[BN89] Richard H. Byrd and Jorge Nocedal. A tool for the analysis of quasi-Newton methods with application to unconstrained minimization. *SIAM Journal on Numerical Analysis*, 26(3):727–739, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bourlard:1991:ABE

[BNP91] M. Bourlard, S. Nicaise, and L. Paquet. An adapted boundary element method for the Dirichlet problem in polygonal domains. *SIAM Journal on Numerical Analysis*, 28(3):728–743, June 1991.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Byrd:1987:GCC

[BNY87] Richard H. Byrd, Jorge Nocedal, and Ya Xiang Yuan. Global convergence of a class of quasi-Newton methods on convex problems. *SIAM Journal on Numerical Analysis*, 24 (5):1171–1190, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1983:GFE

[BO83] I. Babuška and J. E. Osborn. Generalized finite element methods: their performance and their relation to mixed methods. *SIAM Journal on Numerical Analysis*, 20 (3):510–536, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenier:1986:ARS

[BO86] Yann Brenier and Stanley Osher. Approximate Riemann solvers and numerical flux functions. *SIAM Journal on Numerical Analysis*, 23 (2):259–273, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1987:EEE

[BO87] I. Babuška and J. E. Osborn. Estimates for the errors in eigenvalue and eigenvector approximation by Galerkin methods, with particular attention to the case of multiple eigenvalues. *SIAM Journal on Numerical Analysis*, 24(6): 1249–1276, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenier:1988:DOS

[BO88] Yann Brenier and Stanley Osher. The discrete one-sided Lipschitz condition for convex scalar conservation laws. *SIAM Journal on Numerical Analysis*, 25(1):8–23, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bochev:1997:ALS

[Boc97] Pavel B. Bochev. Analysis of least-squares finite element methods for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 34 (5):1817–1844, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27600`.

Boffi:1997:TDF

[Bof97] Daniele Boffi. Three-dimensional finite element methods for the Stokes problem. *SIAM Journal on Numerical Analysis*, 34(2): 664–670, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170

(electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27019.

Boggs:1971:SNS

[Bog71] Paul T. Boggs. The solution of nonlinear systems of equations by A-stable integration techniques. *SIAM Journal on Numerical Analysis*, 8 (4):767–785, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Boggs:1977:ABS

[Bog77] Paul T. Boggs. An algorithm, based on singular perturbation theory, for ill-conditioned minimization problems. *SIAM Journal on Numerical Analysis*, 14 (5):830–843, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bogomolny:1985:FSM

[Bog85] Alexander Bogomolny. Fundamental solutions method for elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 22(4): 644–669, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bohl:1977:SIN

[Boh77] Erich Bohl. On a stability inequality for nonlinear operators. *SIAM Journal on Numerical Analysis*, 14(2): 242–253, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Boillat:1997:LFE

[Boi97] Eric Boillat. On the locking of the finite element method in thermoelasticity. *SIAM Journal on Numerical Analysis*, 34(6): 2319–2334, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27101.

Bojanczyk:1984:CSL

[Boj84] A. Bojańczyk. Complexity of solving linear systems in different models of computation. *SIAM Journal on Numerical Analysis*, 21(3):591–603, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Boland:1972:CPT

[Bol72] W. Robert Boland. The convergence of product-type quadrature formulas. *SIAM Journal on Numerical Analysis*, 9(1):6–13, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Borowsky:1976:CBC

[Bor76] Michael S. Borowsky. Characterizations of best complex Chebyshev approximate solutions of $Av = b$. *SIAM Jour-*

nal on Numerical Analysis, 13 (3):324–336, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Borgers:1990:TAF

[Bör90] Christoph Börgers. A triangulation algorithm for fast elliptic solvers based on domain imbedding. *SIAM Journal on Numerical Analysis*, 27 (5):1187–1196, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bourdarias:1998:ASS

[Bou98] C. Bourdarias. Approximation of the solution to a system modeling heatless adsorption of gases. *SIAM Journal on Numerical Analysis*, 35(1):13–30, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24824`.

Boyd:1977:NBM

[Boy77] David W. Boyd. Nonconvergence in Bairstow's method. *SIAM Journal on Numerical Analysis*, 14(3):571–574, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brooks:1967:AEE

[BP67] John D. Brooks and David A. Pope. Asymptotic error estimates and the numerical solution of the equations of orbital motion. *SIAM Journal on Numerical Analysis*, 4 (3):446–456, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bunch:1971:DMS

[BP71] J. R. Bunch and B. N. Parlett. Direct methods for solving symmetric indefinite systems of linear equations. *SIAM Journal on Numerical Analysis*, 8(4):639–655, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Berman:1974:CIM

[BP74] Abraham Berman and Robert J. Plemmons. Cones and iterative methods for best least squares solutions of linear systems. *SIAM Journal on Numerical Analysis*, 11(1): 145–154, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brutman:1980:ECC

[BP80] L. Brutman and A. Pinkus. On the Erdős conjecture concerning minimal norm interpolation on the unit circle. *SIAM Journal on Numerical Analysis*, 17(3):373–375, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenan:1989:NSH

[BP89] Kathryn E. Brenan and Linda R. Petzold. The numerical solution of higher index differential/algebraic equations by implicit methods. *SIAM Journal on Numerical Analysis*, 26(4):976–996, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Burrage:1990:ORR

[BP90] Kevin Burrage and Linda Petzold. On order reduction for Runge–Kutta methods applied to differential/algebraic systems and to stiff systems of ODEs. *SIAM Journal on Numerical Analysis*, 27(2): 447–456, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baker:1996:GCT

[BP96] Christopher T. H. Baker and Christopher A. H. Paul. A global convergence theorem for a class of parallel continuous explicit Runge–Kutta methods and vanishing lag delay differential equations. *SIAM Journal on Numerical Analysis*, 33 (4):1559–1576, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25141`.

Barrodale:1972:DCA

[BPR72] I. Barrodale, M. J. D. Powell, and F. D. K. Roberts. The differential correction algorithm for rational $\updownarrow_\infty$-approximation. *SIAM Journal on Numerical Analysis*, 9 (3):493–504, September 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bonnans:1992:AME

[BPTZ92] J. Frédéric Bonnans, Eliane R. Panier, André L. Tits, and Jian L. Zhou. Avoiding the maratos effect by means of a nonmonotone line search. II. inequality constrained problems — feasible iterates. *SIAM Journal on Numerical Analysis*, 29(4):1187–1202, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bramble:1997:AIU

[BPV97] James H. Bramble, Joseph E. Pasciak, and Apostol T. Vassilev. Analysis of the inexact Uzawa algorithm for saddle point problems. *SIAM Journal on Numerical Analysis*, 34(3):1072–1092, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27334`.

Beauwens:1976:ECP

[BQ76] Robert Beauwens and Lena Quenon. Existence criteria for partial matrix factorizations in iterative methods. *SIAM Journal on Numerical Analysis*, 13(4):615–643, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bressan:1986:ACC

[BQ86] N. Bressan and A. Quarteroni. Analysis of Chebyshev collocation methods for parabolic equations. *SIAM Journal on Numerical Analysis*, 23(6):1138–1154, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baker:1970:EBS

[BR70] Christopher T. H. Baker and Pauline A. Radcliffe. Error bounds for some Chebyshev methods of approximation and integration. *SIAM Journal on Numerical Analysis*, 7(2):317–327, June 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barrodale:1973:IAD

[BR73] I. Barrodale and F. D. K. Roberts. An improved algorithm for discrete l_1 linear approximation. *SIAM Journal on Numerical Analysis*, 10(5): 839–848, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bank:1975:MSC

[BR75] Randolph E. Bank and Donald J. Rose. An $O(n^2)$ method for solving constant coefficient boundary value problems in two dimensions. *SIAM Journal on Numerical Analysis*, 12(4):529–540, September 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bank:1977:MAEa

[BR77] Randolph E. Bank and Donald J. Rose. Marching algorithms for elliptic boundary value problems. I: The constant coefficient case. *SIAM Journal on Numerical Analysis*, 14(5):792–829, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1978:EEA

[BR78a] I. Babuška and W. C. Rheinboldt. Error estimates for adaptive finite element computations. *SIAM Journal on Numerical Analysis*, 15(4): 736–754, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barrodale:1978:EAD

[BR78b] I. Barrodale and F. D. K. Roberts. An efficient algorithm for discrete l_1 linear approximation with linear constraints. *SIAM Journal on Numerical Analysis*, 15 (3):603–611, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bank:1980:PSN

[BR80] R. E. Bank and D. J. Rose. Parameter selection for Newton-like methods applicable to nonlinear partial differential equations. *SIAM Journal on Numerical Analysis*, 17(6):806–822, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1981:PEA

[BR81] Ivo Babuška and Werner C. Rheinboldt. *A Posteriori* error analysis of finite element solutions for one-dimensional problems. *SIAM Journal on Numerical Analysis*, 18(3): 565–589, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bernardi:1985:CFE

[BR85] Christine Bernardi and Geneviève Raugel. A conforming finite element method for the time-dependent Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 22 (3):455–473, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bank:1987:SEE

[BR87] Randolph E. Bank and Donald J. Rose. Some error estimates for the box method. *SIAM Journal on Numerical Analysis*, 24(4): 777–787, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Blum:1988:NST

[BR88] E. K. Blum and G. J. Reid. On the numerical solution of three-dimensional boundary value problems by separation of variables. *SIAM Journal on Numerical Analysis*, 25(1):75–90, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bramble:1966:EED

[Bra66a] J. H. Bramble. Error estimates for difference methods in forced vibration problems. *SIAM Journal on Numerical Analysis*, 3(1):1–12, March 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brauer:1966:MCG

[Bra66b] Alfred Brauer. A method for the computation of the greatest root of a nonnegative matrix. *SIAM Journal on Numerical Analysis*, 3 (4):564–569, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Braaten:1980:IMN

[Bra80] Eric Braaten. An improved measure of the nonuniformity of the distribution of a sequence. *SIAM Journal on Numerical Analysis*, 17(1):31–32, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brannigan:1985:DCA

[Bra85] Michael Brannigan. Discrete Chebyshev approximation with linear constraints. *SIAM Journal on Numerical Analysis*, 22(1):1–15, February 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brandt:1994:RQA

[Bra94] Achi Brandt. Rigorous quantitative analysis of multigrid, I: Constant coefficients two-level cycle with L_2-norm. *SIAM Journal on Numerical Analysis*, 31(6):1695–1730, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Butler:1981:ESF

[BRD81] J. P. Butler, J. A. Reeds, and S. V. Dawson. Estimating solutions of first kind integral equations with nonnegative constraints and optimal smoothing. *SIAM Journal on Numerical Analysis*, 18 (3):381–397, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brent:1973:SEA

[Bre73] Richard P. Brent. Some efficient algorithms for solving systems of nonlinear equations. *SIAM Journal on Numerical Analysis*, 10(2): 327–344, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenner:1975:MNE

[Bre75] Philip Brenner. Maximum-norm estimates of the rate of convergence of dissipative difference schemes for strictly hyperbolic systems. *SIAM Journal on Numerical Analysis*, 12(5):726–740, October 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenner:1977:EDS

[Bre77] Philip Brenner. L_p-estimates of difference schemes for strictly hyperbolic systems with nonsmooth data. *SIAM Journal on Numerical Analysis*, 14(6):1126–1144, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenier:1984:AMS

[Bre84] Yann Brenier. Averaged multivalued solutions for scalar conservation laws. *SIAM*

Journal on Numerical Analysis, 21(6):1013–1037, December 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenner:1989:OON

[Bre89] Susanne C. Brenner. An optimal-order nonconforming multigrid method for the biharmonic equation. *SIAM Journal on Numerical Analysis*, 26(5):1124–1138, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenner:1992:MAL

[Bre92] Susanne C. Brenner. A multigrid algorithm for the lowest-order Raviart–Thomas mixed triangular finite element method. *SIAM Journal on Numerical Analysis*, 29(3):647–678, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenner:1993:NMM

[Bre93] Susanne C. Brenner. A nonconforming mixed multigrid method for the pure displacement problem in planar linear elasticity. *SIAM Journal on Numerical Analysis*, 30(1):116–135, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenner:1998:OCS

[Bre98] Susanne C. Brenner. Overcoming corner singularities using multigrid methods. *SIAM Journal on Numerical Analysis*, 35(5):1883–1892, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30802`.

Brown:1969:QCN

[Bro69] Kenneth M. Brown. A quadratically convergent Newton-like method based upon Gaussian elimination. *SIAM Journal on Numerical Analysis*, 6(4):560–569, December 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brown:1977:SCI

[Bro77] R. Leonard Brown. Some characteristics of implicit multistep multi-derivative integration formulas. *SIAM Journal on Numerical Analysis*, 14(6):982–993, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brown:1987:LCT

[Bro87] Peter N. Brown. A local convergence theory for combined inexact-Newton/finite-difference projection methods. *SIAM Journal on Numerical Analysis*, 24(2):

407–434, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brown:1995:LAD

[Bro95] Peter N. Brown. A linear algebraic development of diffusion synthetic acceleration for three-dimensional transport equations. *SIAM Journal on Numerical Analysis*, 32 (1):179–214, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brutman:1978:LFP

[Bru78] L. Brutman. On the Lebesgue function for polynomial interpolation. *SIAM Journal on Numerical Analysis*, 15(4): 694–704, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brutman:1980:PRP

[Bru80] L. Brutman. On the polynomial and rational projections in the complex plane. *SIAM Journal on Numerical Analysis*, 17(3):366–372, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brunner:1983:NSC

[Bru83] Hermann Brunner. Nonpolynomial spline collocation for Volterra equations with weakly singular kernels. *SIAM Journal on Numerical Analysis*, 20(6):1106–1119, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brunner:1984:ICM

[Bru84] Hermann Brunner. Iterated collocation methods and their discretizations for Volterra integral equations. *SIAM Journal on Numerical Analysis*, 21(6):1132–1145, December 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brunner:1990:NSN

[Bru90] Hermann Brunner. On the numerical solution of nonlinear Volterra–Fredholm integral equations by collocation methods. *SIAM Journal on Numerical Analysis*, 27(4): 987–1000, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brutman:1991:PEU

[Bru91] L. Brutman. Polynomial extrapolation from $[-1, 1]$ to the unit disc. *SIAM Journal on Numerical Analysis*, 28(2): 573–579, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bryan:1968:ASN

[Bry68] Charles A. Bryan. Approximate solutions to nonlinear integral equations. *SIAM*

Journal on Numerical Analysis, 5(1):151–155, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barrow:1976:EGH

[BS76] David L. Barrow and A. H. Stroud. Existence of Gauss harmonic interpolation formulas. *SIAM Journal on Numerical Analysis*, 13(1): 18–26, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bruch:1977:HAD

[BS77] John C. Bruch, Jr. and James M. Sloss. Harmonic approximation with Dirichlet data on doubly connected regions. *SIAM Journal on Numerical Analysis*, 14(6):994–1005, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bavely:1979:ACR

[BS79] Connice A. Bavely and G. W. Stewart. An algorithm for computing reducing subspaces by block diagonalization. *SIAM Journal on Numerical Analysis*, 16(2): 359–367, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bube:1983:IRE

[BS83] K. P. Bube and J. C. Strikwerda. Interior regularity estimates for elliptic systems of difference equations. *SIAM Journal on Numerical Analysis*, 20(4):653–670, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1987:OCR

[BS87a] I. Babuška and Manil Suri. The optimal convergence rate of the p-version of the finite element method. *SIAM Journal on Numerical Analysis*, 24(4): 750–776, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Baszenski:1987:MFU

[BS87b] Günter Baszenski and Larry L. Schumaker. On a method for fitting an unknown function based on mean-value measurements. *SIAM Journal on Numerical Analysis*, 24(3): 725–736, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bank:1989:CFE

[BS89a] Randolph E. Bank and L. Ridgway Scott. On the conditioning of finite element equations with highly refined meshes. *SIAM Journal on Numerical Analysis*, 26(6): 1383–1394, December 1989.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Batterson:1989:DRQ

[BS89b] Steve Batterson and John Smillie. The dynamics of Rayleigh quotient iteration. *SIAM Journal on Numerical Analysis*, 26(3):624–636, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1992:LRF

[BS92] Ivo Babuška and Manil Suri. On locking and robustness in the finite element method. *SIAM Journal on Numerical Analysis*, 29(5):1261–1293, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bank:1993:ASM

[BS93a] Randolph E. Bank and Rafael F. Santos. Analysis of some moving space-time finite element methods. *SIAM Journal on Numerical Analysis*, 30(1):1–18, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bank:1993:PEE

[BS93b] Randolph E. Bank and R. Kent Smith. *A Posteriori* error estimates based on hierarchical bases. *SIAM Journal on Numerical Analysis*, 30(4):921–935, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Burrage:1994:CVS

[BS94] K. Burrage and P. W. Sharp. A class of variable-step explicit Nordsieck multivalue methods. *SIAM Journal on Numerical Analysis*, 31 (5):1434–1451, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1996:PEE

[BS96] I. Babuška and C. Schwab. *A Posteriori* error estimation for hierarchic models of elliptic boundary value problems on thin domains. *SIAM Journal on Numerical Analysis*, 33(1): 221–246, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1997:PEF

[BS97a] Ivo M. Babuška and Stefan A. Sauter. Is the pollution effect of the FEM avoidable for the Helmholtz equation considering high wave numbers. *SIAM Journal on Numerical Analysis*, 34(6): 2392–2423, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26918.

Balland:1997:ACV

[BS97b] Philippe Balland and Endre Süli. Analysis of the cell-vertex finite volume method for hyperbolic problems with variable coefficients. *SIAM Journal on Numerical Analysis*, 34 (3):1127–1151, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26488`.

Bank:1997:MSU

[BS97c] Randolph E. Bank and R. Kent Smith. Mesh smoothing using A posteriori error estimates. *SIAM Journal on Numerical Analysis*, 34(3):979–997, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26529`.

Babuska:1981:VFE

[BSK81] I. Babuška, B. A. Szabø, and I. N. Katz. The p-version of the finite element method. *SIAM Journal on Numerical Analysis*, 18(3):515–545, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Byrd:1987:TRA

[BSS87] Richard H. Byrd, Robert B. Schnabel, and Gerald A. Shultz. A trust region algorithm for nonlinearly constrained optimization. *SIAM Journal on Numerical Analysis*, 24(5):1152–1170, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bramble:1977:SCE

[BSTW77] J. H. Bramble, A. H. Schatz, V. Thomee, and L. B. Wahlbin. Some convergence estimates for semidiscrete Galerkin type approximations for parabolic equations. *SIAM Journal on Numerical Analysis*, 14(2): 218–241, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bell:1985:ANM

[BSW85] John B. Bell, Gregory R. Shubin, and Mary Fanett Wheeler. Analysis of a new method for computing the flow of miscible fluids in a porous medium. *SIAM Journal on Numerical Analysis*, 22(6):1041–1050, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Buttner:1995:MAP

[BSW95] Mario Büttner, Bernhard A. Schmitt, and Rüdiger Weiner. W-methods with automatic partitioning by Krylov techniques for large stiff systems. *SIAM Journal on Numerical Analysis*, 32(1):260–

284, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Buchanan:1968:LSF

[BT68] John E. Buchanan and Donald H. Thomas. On least-squares fitting of two-dimensional data with a special structure. *SIAM Journal on Numerical Analysis*, 5 (2):252–257, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bramble:1969:PBD

[BT69] J. H. Bramble and V. Thomee. Pointwise bounds for discrete Green's functions. *SIAM Journal on Numerical Analysis*, 6(4):583–590, December 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenner:1979:RAS

[BT79] Philip Brenner and Vidar Thomée. On rational approximations of semigroups. *SIAM Journal on Numerical Analysis*, 16(4):683–694, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Brenner:1980:RAG

[BT80] Philip Brenner and Vidar Thomée. On rational approximations of groups of operators. *SIAM Journal on Numerical Analysis*, 17(1):119–125, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Boggs:1984:FDF

[BT84] Paul T. Boggs and Jon W. Tolle. A family of descent functions for constrained optimization. *SIAM Journal on Numerical Analysis*, 21(6): 1146–1161, December 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Boggs:1989:SGC

[BT89] Paul T. Boggs and Jon W. Tolle. A strategy for global convergence in a sequential quadratic programming algorithm. *SIAM Journal on Numerical Analysis*, 26(3): 600–623, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bellen:1997:UCM

[BT97] A. Bellen and L. Torelli. Unconditional contractivity in the maximum norm of diagonally split Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 34(2): 528–543, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26757`.

Bailly:1999:CCP

[BT99] B. Le Bailly and J. P. Thiran. Computing complex polynomial Chebyshev approximants on the unit circle by the real Remez algorithm. *SIAM Journal on Numerical Analysis*, 36(6): 1858–1877, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/33951.

Banks:1993:EVC

[BTW93] H. T. Banks, H. T. Tran, and D. E. Woodward. Estimation of variable coefficients in the Fokker–Planck equations using moving node finite elements. *SIAM Journal on Numerical Analysis*, 30(6):1574–1602, December 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bube:1978:CTI

[Bub78] Kenneth P. Bube. C^m convergence of trigonometric interpolants. *SIAM Journal on Numerical Analysis*, 15(6): 1258–1268, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bube:1985:CNI

[Bub85] Kenneth P. Bube. Convergence of numerical inversion methods for discontinuous impedance profiles. *SIAM Journal on Numerical Analysis*, 22(5):924–946, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bube:1986:NMR

[Bub86] Kenneth P. Bube. Numerical methods for reflection inverse problems: convergence and nonimpulsive sources. *SIAM Journal on Numerical Analysis*, 23(2): 227–258, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Buchanan:1966:NPM

[Buc66] Mary Louise Buchanan. Norms of powers of matrices in a special class. *SIAM Journal on Numerical Analysis*, 3 (4):616–623, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Buckley:1976:CMU

[Buc76] A. G. Buckley. Constrained minimization using Powell's conjugacy approach. *SIAM Journal on Numerical Analysis*, 13(4):520–535, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Buckley:1977:SCS

[Buc77] A. Buckley. On the solution of certain skew symmetric linear systems. *SIAM Journal on Numerical Analysis*, 14(3):

566–570, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bunch:1971:ADP

[Bun71] J. R. Bunch. Analysis of the diagonal pivoting method. *SIAM Journal on Numerical Analysis*, 8(4):656–680, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bunch:1974:ASE

[Bun74a] James R. Bunch. Analysis of sparse elimination. *SIAM Journal on Numerical Analysis*, 11(5):847–873, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bunch:1974:PPS

[Bun74b] James R. Bunch. Partial pivoting strategies for symmetric matrices. *SIAM Journal on Numerical Analysis*, 11(3): 521–528, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bunse:1981:CDT

[Bun81] Wolfgang Bunse. A class of diagonal transformation methods for the computation of the spectral radius of a nonnegative irreducible matrix. *SIAM Journal on Numerical Analysis*, 18(4):693–704, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Burrage:1982:EIA

[Bur82] Kevin Burrage. Efficiently implementable algebraically stable Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 19(2): 245–258, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Burrage:1987:HOA

[Bur87] K. Burrage. High order algebraically stable multistep Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 24(1):106–115, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Burke:1990:IAC

[Bur90] Jim Burke. On the identification of active constraints II: The nonconvex case. *SIAM Journal on Numerical Analysis*, 27(4):1081–1102, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Busch:1985:OI

[Bus85] J. R. Busch. Osculatory interpolation in $\mathbf{R}^n$. *SIAM Journal on Numerical Analysis*, 22 (1):107–113, February 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Butzer:1964:SA

[But64] P. L. Butzer. Saturation and approximation. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??):2–10, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic). See errata [But65].

Butzer:1965:ESA

[But65] P. L. Butzer. Errata: "Saturation and Approximation" [J. Soc. Ind. Appl. Math., Ser. B Numer. anal. **1**] (1964), 2-10. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):203, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic). See [But64].

Butcher:1975:OBR

[But75] J. C. Butcher. An order bound for Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 12(3): 304–315, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Butcher:1981:SPG

[But81] J. C. Butcher. Stability properties for a general class of methods for ordinary differential equations. *SIAM Journal on Numerical Analysis*, 18(1): 37–44, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). In SIGNUM Meeting on Numerical Ordinary Differential Equations.

Buzbee:1977:AFP

[Buz77] B. L. Buzbee. Application of fast Poisson solvers to *A*-stable marching procedures for parabolic problems. *SIAM Journal on Numerical Analysis*, 14(2): 205–217, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Braess:1990:MMN

[BV90] D. Braess and R. Verfürth. Multigrid methods for nonconforming finite element methods. *SIAM Journal on Numerical Analysis*, 27(4): 979–986, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barlow:1992:NDC

[BV92] Jesse L. Barlow and Udaya B. Vemulapati. A note on deferred correction for equality constrained least squares problems. *SIAM Journal on Numerical Analysis*, 29(1): 249–256, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Braess:1996:PEE

[BV96] D. Braess and R. Verfürth. *A Posteriori* error estimators for the Raviart–Thomas element. *SIAM Journal on*

Numerical Analysis, 33(6): 2431–2444, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26407.

Babuska:1994:NTV

[BvA94] I. Babuška, T. von Petersdorff, and B. Andersson. Numerical treatment of vertex singularities and intensity factors for mixed boundary value problems for the Laplace equation in $\mathbf{R}^3$. *SIAM Journal on Numerical Analysis*, 31 (5):1265–1288, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barnhill:1968:EAI

[BW68] Robert E. Barnhill and James A. Wixom. An error analysis for interpolation of analytic functions. *SIAM Journal on Numerical Analysis*, 5(3):522–529, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Barnhill:1969:EAB

[BW69] Robert E. Barnhill and James A. Wixom. An error analysis for the bivariate interpolation of analytic functions. *SIAM Journal on Numerical Analysis*, 6(3):450–457, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bownds:1976:NSN

[BW76] John M. Bownds and Bruce Wood. On numerically solving nonlinear Volterra integral equations with fewer computations. *SIAM Journal on Numerical Analysis*, 13(5): 705–719, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bjorstad:1986:IMS

[BW86] Petter E. Bjørstad and Olof B. Widlund. Iterative methods for the solution of elliptic problems on regions partitioned into substructures. *SIAM Journal on Numerical Analysis*, 23(6): 1097–1120, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beatson:1989:PPP

[BW89] R. K. Beatson and H. Wolkowicz. Post-processing piecewise cubics for monotonicity. *SIAM Journal on Numerical Analysis*, 26(2): 480–502, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Borgers:1990:FED

[BW90a] Christoph Börgers and Olof B. Widlund. On finite element domain imbedding methods. *SIAM Journal on Numerical Analysis*, 27(4):963–978, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bourji:1990:LCS

[BW90b] Samih K. Bourji and Homer F. Walker. Least-change secant updates of nonsquare matrices. *SIAM Journal on Numerical Analysis*, 27(5):1263–1294, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bank:1991:PEE

[BW91] Randolph E. Bank and Bruno D. Welfert. *A Posteriori* error estimates for the Stokes problem. *SIAM Journal on Numerical Analysis*, 28 (3):591–623, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bottcher:1993:GPM

[BW93] Albrecht Böttcher and Hartmut Wolf. Galerkin–Petrov methods for Bergman space Toeplitz operators. *SIAM Journal on Numerical Analysis*, 30(3):846–863, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Benassi:1994:PNS

[BW94] M. Benassi and R. E. White. Parallel numerical solution of variational inequalities. *SIAM Journal on Numerical Analysis*, 31(3):813–830, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bramble:1989:LPP

[BX89] James H. Bramble and Jin Chao Xu. A local post-processing technique for improving the accuracy in mixed finite-element approximations. *SIAM Journal on Numerical Analysis*, 26(6): 1267–1275, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ben-Yu:1998:FDL

[BYLP98] Guo Ben-Yu and He Li-Ping. The fully discrete Legendre spectral approximation of two-dimensional unsteady incompressible fluid flow in stream function form. *SIAM Journal on Numerical Analysis*, 35(1):146–176, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29708`.

Byrd:1990:CCO

[Byr90] Richard H. Byrd. On the convergence of constrained optimization methods with accurate Hessian information on a subspace. *SIAM Journal on Numerical Analysis*, 27(1): 141–153, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Babuska:1973:NEF

[BZ73] Ivo Babuška and Milos Zlamal. Nonconforming elements in the finite element method with penalty. *SIAM Journal on Numerical Analysis*, 10(5): 863–875, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Beatson:1985:MPS

[BZ85] R. K. Beatson and Z. Ziegler. Monotonicity preserving surface interpolation. *SIAM Journal on Numerical Analysis*, 22(2):401–411, April 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Bellen:1988:SPI

[BZ88] Alfredo Bellen and Marino Zennaro. Stability properties of interpolants for Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 25 (2):411–432, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cadzow:1973:FAM

[Cad73] James A. Cadzow. A finite algorithm for the minimum l_∞ solution to a system of consistent linear equations. *SIAM Journal on Numerical Analysis*, 10(4):607–617, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cadzow:1974:EAP

[Cad74] James A. Cadzow. An efficient algorithmic procedure for obtaining a minimum l_∞-norm solution to a system of consistent linear equations. *SIAM Journal on Numerical Analysis*, 11(6):1151–1165, December 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Callender:1971:SSM

[Cal71] E. David Callender. Single step methods and low order splines for solutions of ordinary differential equations. *SIAM Journal on Numerical Analysis*, 8(1):61–66, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Caldwell:1974:RCA

[Cal74] C. S. Caldwell. Rates of convergence of approximate solutions of parabolic initial-boundary value problems. *SIAM Journal on Numerical Analysis*, 11(6):1121–

1135, December 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Caldwell:1976:CEL

[Cal76] C. S. Caldwell. Convergence estimates for a locally one-dimensional finite difference scheme for parabolic initial-boundary value problems. *SIAM Journal on Numerical Analysis*, 13(4):514–519, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cannon:1968:DUH

[Can68] J. R. Cannon. Determination of an unknown heat source from overspecified boundary data. *SIAM Journal on Numerical Analysis*, 5(2): 275–286, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cantor:1983:NTP

[Can83] Murray Cantor. Numerical treatment of potential type equations on $\mathbf{R}^n$: Theoretical considerations. *SIAM Journal on Numerical Analysis*, 20(1): 72–85, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Canuto:1986:BCC

[Can86] Claudio Canuto. Boundary conditions in Chebyshev and Legendre methods. *SIAM Journal on Numerical Analysis*, 23(4):815–831, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Candela:1994:CSO

[Can94] Vicente F. Candela. Computation of shift operators in orthonormal compactly supported wavelet bases. *SIAM Journal on Numerical Analysis*, 31(3):768–787, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Capizzano:1999:KBA

[Cap99] Stefano Serra Capizzano. A Korovkin-based approximation of multilevel Toeplitz matrices (with rectangular unstructured blocks) via multilevel trigonometric matrix spaces. *SIAM Journal on Numerical Analysis*, 36(6): 1831–1857, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32249`.

Carasso:1972:BBE

[Car72] Alfred Carasso. The backward beam equation: Two A-stable schemes for parabolic problems. *SIAM Journal on Numerical Analysis*, 9 (3):406–434, September 1972. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic).

Carasso:1974:LSM

[Car74] Alfred Carasso. On least squares methods for parabolic equations and the computation of time-periodic solutions. *SIAM Journal on Numerical Analysis*, 11(6):1181–1192, December 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carter:1991:GCT

[Car91] Richard G. Carter. On the global convergence of trust region algorithms using inexact gradient information. *SIAM Journal on Numerical Analysis*, 28(1):251–265, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carstensen:1992:GMS

[Car92] Carsten Carstensen. On Grau's method for simultaneous factorization of polynomials. *SIAM Journal on Numerical Analysis*, 29(2):601–613, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carasso:1994:OHC

[Car94] Alfred S. Carasso. Overcoming Hölder continuity in ill-posed continuation problems. *SIAM Journal on Numerical Analysis*, 31(6):1535–1557, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carstensen:1996:CFB

[Car96] Carsten Carstensen. Coupling of FEM and BEM for interface problems in viscoplasticity and plasticity with hardening. *SIAM Journal on Numerical Analysis*, 33(1):171–207, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carasso:1999:LNI

[Car99] Alfred S. Carasso. Linear and nonlinear image deblurring: A documented study. *SIAM Journal on Numerical Analysis*, 36(6):1659–1689, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32041`.

Cassity:1966:SFO

[Cas66] C. R. Cassity. Solutions of the fifth-order Runge–Kutta equations. *SIAM Journal on Numerical Analysis*, 3(4):598–606, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cassity:1969:CSF

[Cas69] C. R. Cassity. The complete solution of the fifth order Runge–Kutta equations. *SIAM Journal on Numerical Analysis*, 6(3):432–436, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cash:1981:EFC

[Cas81a] J. R. Cash. On the exponential fitting of composite, multiderivative linear multistep methods. *SIAM Journal on Numerical Analysis*, 18(5):808–821, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cash:1981:SDE

[Cas81b] J. R. Cash. Second derivative extended backward differentiation formulas for the numerical integration of stiff systems. *SIAM Journal on Numerical Analysis*, 18(1):21–36, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). In SIGNUM Meeting on Numerical Ordinary Differential Equations.

Cash:1982:SBT

[Cas82] J. R. Cash. On the solution of block tridiagonal systems of linear algebraic equations having a special structure. *SIAM Journal on Numerical Analysis*, 19(6):1220–1232, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cash:1984:TNF

[Cas84] J. R. Cash. Two new finite difference schemes for parabolic equations. *SIAM Journal on Numerical Analysis*, 21(3):433–446, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cash:1988:NIN

[Cas88] J. R. Cash. On the numerical integration of nonlinear two-point boundary value problems using iterated deferred corrections. part 2: The development and analysis of highly stable deferred correction formulae. *SIAM Journal on Numerical Analysis*, 25(4):862–882, August 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Casarin:1997:QOS

[Cas97] Mario A. Casarin. Quasi-optimal Schwarz methods for the conforming spectral element discretization. *SIAM Journal on Numerical Analysis*, 34(6):2482–2502, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29228`.

Cannon:1966:NSS

[CC66] J. R. Cannon and Maria M. Cecchi. The numerical solution of some biharmonic problems by mathematical programming techniques. *SIAM Journal on Numerical Analysis*, 3(3):451–466, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cannon:1967:NES

[CC67] J. R. Cannon and Maria M. Cecchi. Numerical experiments on the solution of some biharmonic problems by mathematical programming techniques. *SIAM Journal on Numerical Analysis*, 4 (2):147–154, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Charalambous:1978:EMS

[CC78] C. Charalambous and A. R. Conn. An efficient method to solve the minimax problem directly. *SIAM Journal on Numerical Analysis*, 15(1): 162–187, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Coleman:1984:LCQ

[CC84] Thomas F. Coleman and Andrew R. Conn. On the local convergence of a quasi-Newton method for the nonlinear programming problem. *SIAM Journal on Numerical Analysis*, 21(4):755–769, August 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chipot:1992:NAV

[CC92] Michel Chipot and Charles Collins. Numerical approximations in variational problems with potential wells. *SIAM Journal on Numerical Analysis*, 29(4):1002–1019, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chen:1994:EEF

[CC94] Zhangxin Chen and Bernardo Cockburn. Error estimates for a finite element method for the drift-diffusion semiconductor device equations. *SIAM Journal on Numerical Analysis*, 31(4):1062–1089, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Caselles:1996:SM

[CC96a] V. Caselles and B. Coll. Snakes in movement. *SIAM Journal on Numerical Analysis*, 33(6):2445–2456, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27504`.

Chen:1996:LSS

[CC96b] Xuzhou Chen and Moody T. Chu. On the least squares solution of inverse eigenvalue problems. *SIAM Journal on Numerical Analysis*, 33(6): 2417–2430, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26474`.

Cockburn:1995:CFV

[CCL95] B. Cockburn, F. Coquel, and P. G. LeFloch. Convergence of the finite volume method for multidimensional conservation laws. *SIAM Journal on Numerical Analysis*, 32(3): 687–705, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cannon:1967:CPH

[CD67] J. R. Cannon and Jim Douglas, Jr. The Cauchy problem for the heat equation. *SIAM Journal on Numerical Analysis*, 4(3):317–336, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cannon:1977:ASC

[CD77] J. R. Cannon and P. DuChateau. Approximating the solution to the Cauchy problem for Laplace's equation. *SIAM Journal on Numerical Analysis*, 14(3):473–483, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carey:1985:GFM

[CD85] Graham F. Carey and Hung T. Dinh. Grading functions and mesh redistribution. *SIAM Journal on Numerical Analysis*, 22(5):1028–1040, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cohn:1988:ODP

[CD88] Stephen E. Cohn and Dick P. Dee. Observability of discretized partial differential equations. *SIAM Journal on Numerical Analysis*, 25(3): 586–617, June 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chu:1990:PGM

[CD90] Moody T. Chu and Kenneth R. Driessel. The projected gradient method for least squares matrix approximations with spectral constraints. *SIAM Journal on Numerical Analysis*, 27(4): 1050–1060, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cessenat:1998:AUW

[CD98] Olivier Cessenat and Bruno Despres. Application of an ultra weak variational formulation of elliptic PDEs to the two-dimensional Helmholtz problem. *SIAM Journal on Numerical Analysis*, 35 (1):255–299, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28587.

Catte:1995:MSM

[CDK95] Francine Catté, Françoise Dibos, and Georges Koepfler. A morphological scheme for mean curvature motion and applications to anisotropic diffusion and motion of level sets. *SIAM Journal on Numerical Analysis*, 32(6):1895–1909, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chippada:1999:FEA

[CDMCW99] S. Chippada, C. N. Dawson, M. L. Martínez-Canales, and M. F. Wheeler. Finite element approximations to the system of shallow water equations, Part II: Discrete-time *A Priori* error estimates. *SIAM Journal on Numerical Analysis*, 36 (1):226–250, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/31415.

Chippada:1998:FEA

[CDMW98] S. Chippada, C. N. Dawson, M. L. Martinez, and M. F. Wheeler. Finite element approximations to the system of shallow water equations I: Continuous-time *A Priori* error estimates. *SIAM Journal on Numerical Analysis*, 35(2):692–711, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/29651.

Cai:1999:ONG

[CDS99] Xiao-Chuan Cai, Maksymilian Dryja, and Marcus Sarkis. Overlapping nonmatching grid mortar element methods for elliptic problems. *SIAM Journal on Numerical Analysis*, 36(2):581–606, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/32358.

Cowsar:1996:PEM

[CDW96] Lawrence C. Cowsar, Todd F. Dupont, and Mary F. Wheeler. *A Priori* estimates for mixed finite element approximations of second-order hyperbolic equations with absorbing boundary conditions. *SIAM Journal on Numerical Analysis*, 33(2):492–504, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chen:1997:FDF

[CE97a] Zhangxin Chen and Richard E. Ewing. Fully-discrete finite element analysis of multiphase flow in groundwater hydrology. *SIAM Journal on Numerical Analysis*, 34(6): 2228–2253, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29006`.

Chen:1997:SCF

[CE97b] Zhangxin Chen and Richard E. Ewing. Stability and convergence of a finite element method for reactive transport in ground water. *SIAM Journal on Numerical Analysis*, 34(3):881–904, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27286`.

Cannon:1987:GPD

[CEv87] John R. Cannon, Salvador Pérez Esteva, and John van der Hoek. A Galerkin procedure for the diffusion equation subject to the specification of mass. *SIAM Journal on Numerical Analysis*, 24 (3):499–515, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carlson:1985:MPB

[CF85] R. E. Carlson and F. N. Fritsch. Monotone piecewise bicubic interpolation. *SIAM Journal on Numerical Analysis*, 22(2):386–400, April 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Canuto:1988:SAS

[CF88] C. Canuto and D. Funaro. The Schwarz algorithm for spectral methods. *SIAM Journal on Numerical Analysis*, 25(1):24–40, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carlson:1989:AMP

[CF89] R. E. Carlson and F. N. Fritsch. An algorithm for monotone piecewise bicubic interpolation. *SIAM Journal on Numerical Analysis*, 26(1): 230–238, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Costantini:1990:SPB

[CF90] Paolo Costantini and Ferruccio Fontanella. Shape-preserving bivariate interpolation. *SIAM Journal on Numerical Analysis*, 27(2): 488–506, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Coquel:1993:CFD

[CF93] Frédéric Coquel and Philippe Le Floch. Convergence of finite difference schemes for conservation laws in several space dimensions: A general theory. *SIAM Journal on Numerical Analysis*, 30(3):675–700, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Canuto:1983:ASB

[CFQ83] Claudio Canuto, Hiroshi Fujii, and Alfio Quarteroni. Approximation of symmetry breaking bifurcations for the Rayleigh convection problem. *SIAM Journal on Numerical Analysis*, 20(5):873–884, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Constantin:1984:LTG

[CFT84] P. Constantin, C. Foiaş, and R. Temam. On the large time Galerkin approximation of the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 21(4):615–634, August 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1999:CRQ

[CfXmZ99] Raymond H. Chan, Shu fang Xu, and Hao min Zhou. On the convergence rate of a quasi-Newton method for inverse eigenvalue problems. *SIAM Journal on Numerical Analysis*, 36(2):436–441, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32705`.

Concus:1973:UFD

[CG73] Paul Concus and Gene H. Golub. Use of fast direct methods for the efficient numerical solution of nonseparable elliptic equations. *SIAM Journal on Numerical Analysis*, 10(6):1103–1120, December 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Conn:1984:LDI

[CG84] Andrew R. Conn and Nicholas I. M. Gould. On the location of directions of infinite descent for nonlinear programming algorithms. *SIAM Journal on Numerical Analysis*, 21(6):1162–1179, December 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chang:1990:SGL

[CG90] Ching-Lung Chang and Max D. Gunzburger. A subdomain Galerkin/least squares method for first-order elliptic systems in the plane. *SIAM Journal on Numerical Analysis*, 27(5):1197–1211, October 1990. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Chandler:1993:CWW

[CG93] G. A. Chandler and I. G. Graham. The computation of water waves modelled by Nekrasov's equation. *SIAM Journal on Numerical Analysis*, 30(4):1041–1065, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cockburn:1996:EEF

[CG96] Bernardo Cockburn and Pierre-Alain Gremaud. Error estimates for finite element methods for scalar conservation laws. *SIAM Journal on Numerical Analysis*, 33 (2):522–554, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carstensen:1997:FBC

[CG97] Carsten Carstensen and Joachim Gwinner. FEM and BEM coupling for a nonlinear transmission problem with Signorini contact. *SIAM Journal on Numerical Analysis*, 34(5):1845–1864, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28113`.

Cao:1998:LSF

[CG98] Yanzhao Cao and Max D. Gunzburger. Least-squares finite element approximations to solutions of interface problems. *SIAM Journal on Numerical Analysis*, 35 (1):393–405, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30324`.

Cottet:1991:CGF

[CGH91] Georges-Henri Cottet, Jonathan Goodman, and Thomas Y. Hou. Convergence of the grid-free point vortex method for the three-dimensional Euler equations. *SIAM Journal on Numerical Analysis*, 28 (2):291–307, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:2007:MMC

[CGO07] Raymond H. Chan, Chen Greif, and Dianne P. O'Leary, editors. *Milestones in Matrix Computation: the Selected Works of Gene H. Golub with Commentaries*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2007. ISBN 0-19-920681-3. xi + 565 + 3 pp. LCCN QA188 .G67 2007. URL `http://www.loc.gov/catdir/enhancements/fy0737/2007276086-d.html`.

Cai:1992:OSF

[CGS92] Wei Cai, David Gottlieb, and Chi-Wang Shu. On one-sided filters for spectral Fourier approximations of discontinuous functions. *SIAM Journal on Numerical Analysis*, 29(4): 905–916, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Conn:1988:GCC

[CGT88] A. R. Conn, N. I. M. Gould, and Ph. L. Toint. Global convergence of a class of trust region algorithms for optimization with simple bounds. *SIAM Journal on Numerical Analysis*, 25(2):433–460, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See correction [CGT89].

Conn:1989:CPG

[CGT89] A. R. Conn, N. I. M. Gould, and Ph. L. Toint. Correction to the paper on "Global Convergence of a Class of Trust Region Algorithms for Optimization with Simple Bounds" [SIAM J. Numer. Anal. **25** (1988), no. 2, 433–460, MR 89h:90192]. *SIAM Journal on Numerical Analysis*, 26(3):764–767, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [CGT88].

Conn:1991:GCA

[CGT91] Andrew R. Conn, Nicholas I. M. Gould, and Philippe L. Toint. A globally convergent augmented Lagrangian algorithm for optimization with general constraints and simple bounds. *SIAM Journal on Numerical Analysis*, 28(2): 545–572, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cockburn:1998:PEE

[CGY98] Bernardo Cockburn, Pierre-Alain Gremaud, and Jimmy Xiangrong Yang. *A Priori* error estimates for numerical methods for scalar conservation laws Part III: Multidimensional flux-splitting monotone schemes on non-Cartesian grids. *SIAM Journal on Numerical Analysis*, 35 (5):1775–1803, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31616`.

Cannon:1968:FDM

[CH68] J. R. Cannon and C. Denson Hill. A finite-difference method for degenerate elliptic-parabolic equations. *SIAM Journal on Numerical Analysis*, 5(2):211–218, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cochran:1972:IEB

[CH72] James Alan Cochran and Erold W. Hinds. Improved error bounds for the eigenvalues of certain normal operators. *SIAM Journal on Numerical Analysis*, 9(3):446–453, September 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Coulaud:1994:NAF

[CH94] O. Coulaud and A. Henrot. Numerical approximation of a free boundary problem arising in electromagnetic shaping. *SIAM Journal on Numerical Analysis*, 31(4):1109–1127, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Charron:1995:CLI

[CH95] Richard J. Charron and Min Hu. *A*-contractivity of linearly implicit multistep methods. *SIAM Journal on Numerical Analysis*, 32(1):285–295, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chui:1997:SEA

[CH97] Charles K. Chui and Dong Hong. Swapping edges of arbitrary triangulations to achieve the optimal order of approximation. *SIAM Journal on Numerical Analysis*, 34 (4):1472–1482, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27353`.

Chawla:1968:EEG

[Cha68] M. M. Chawla. On the estimation of errors of Gaussian cubature formulas. *SIAM Journal on Numerical Analysis*, 5(1):172–181, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chawla:1969:DME

[Cha69] M. M. Chawla. On Davis's method for the estimation of errors of Gauss–Chebyshev quadratures. *SIAM Journal on Numerical Analysis*, 6(1):108–117, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chatelin:1973:CAM

[Cha73] Françoise Chatelin. Convergence of approximation methods to compute eigenelements of linear operations. *SIAM Journal on Numerical Analysis*, 10(5):939–948, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chalmers:1978:RCD

[Cha78a] Bruce A. Chalmers. On the rate of convergence of discretization in Chebyshev approximation. *SIAM Journal on Numerical Analysis*, 15(3): 612–617, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chatelin:1978:NCE

[Cha78b] Françoise E. Chatelin. Numerical computation of the eigenelements of linear integral operators by iterations. *SIAM Journal on Numerical Analysis*, 15(6):1112–1124, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1984:DDS

[Cha84a] Tony F. Chan. Deflated decomposition of solutions of nearly singular systems. *SIAM Journal on Numerical Analysis*, 21(4):738–754, August 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1984:SAF

[Cha84b] Tony F. Chan. Stability analysis of finite difference schemes for the advection-diffusion equation. *SIAM Journal on Numerical Analysis*, 21(2):272–284, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1985:ANM

[Cha85a] Tony F. Chan. An approximate Newton method for coupled nonlinear systems. *SIAM Journal on Numerical Analysis*, 22(5):904–913, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chawla:1985:OAI

[Cha85b] M. M. Chawla. On the order and attainable intervals of periodicity of explicit Nyström methods for $y = f(t, y)$. *SIAM Journal on Numerical Analysis*, 22(1):127–131, February 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chandler:1986:SAS

[Cha86] G. A. Chandler. Superconvergent approximations to the solution of a boundary integral equation on polygonal domains. *SIAM Journal on Numerical Analysis*, 23(6): 1214–1229, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1987:APD

[Cha87] Tony F. Chan. Analysis of preconditioners for domain decomposition. *SIAM Journal on Numerical Analysis*, 24 (2):382–390, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1989:SFC

[Cha89] Raymond H. Chan. The spectrum of a family of circulant preconditioned Toeplitz systems. *SIAM Journal on Numerical Analysis*, 26(2): 503–506, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chang:1992:FEA

[Cha92] Ching Lung Chang. Finite element approximation for grad-div type systems in the plane. *SIAM Journal on Numerical Analysis*, 29(2): 452–461, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chartier:1994:SPO

[Cha94] P. Chartier. *L*-stable parallel one-block methods for ordinary differential equations. *SIAM Journal on Numerical Analysis*, 31(2): 552–571, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cheung:1973:QPB

[Che73] To-Yat Cheung. Quasilinear parabolic boundary value problems. approximate solutions and error bounds by linear programming. *SIAM Journal on Numerical Analysis*, 10(6):1061–1079, December 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cheung:1975:ASE

[Che75] To-Yat Cheung. Approximate solutions and error bounds for quasi-linear hyperbolic initial boundary value problems. *SIAM Journal on Numerical Analysis*, 12(1):37–45, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cheung:1977:TNI

[Che77] To-Yat Cheung. Three nonlinear initial value problems of the hyperbolic type. *SIAM Journal on Numerical Analysis*, 14(3):484–491, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chen:1987:SCL

[Che87] Ming Kui Chen. On the solution of circulant linear systems. *SIAM Journal on Numerical Analysis*, 24(3): 668–683, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chen:1988:CS

[Che88] Pei Xian Chen. Convergence of SIP. *SIAM Journal on Numerical Analysis*, 25 (2):342–350, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chen:1993:RMN

[Che93] Wei Dong Chen. A regularization method for the numerical inversion of the Laplace transform. *SIAM Journal on Numerical Analysis*, 30(3): 759–773, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chen:1995:FEA

[Che95] Zhangxin Chen. Finite element analysis of the one-dimensional full drift-diffusion semiconductor model. *SIAM Journal on Numerical Analysis*, 32(2):455–483, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chen:1998:GSC

[Che98] Xiaojun Chen. Global and superlinear convergence of inexact Uzawa methods for saddle point problems with nondifferentiable mappings. *SIAM Journal on Numerical Analysis*, 35(3):1130–1148, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29578`.

Chan:1991:GRC

[CHL91] Tony F. Chan, Thomas Y. Hou, and P. L. Lions. Geometry related convergence results for domain decomposition algorithms. *SIAM Journal on Numerical Analysis*, 28 (2):378–391, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Conrad:1988:AOP

[CHM88] Francis Conrad, Raphaèle Herbin, and Hans D. Mittelmann. Approximation of obstacle problems by continuation methods. *SIAM Journal on Numerical Analysis*, 25(6): 1409–1431, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chong:1978:VMF

[Cho78] T. H. Chong. A variable mesh finite difference method for solving a class of parabolic differential equations in one space variable. *SIAM Journal on Numerical Analysis*, 15(4): 835–857, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chow:1992:FEE

[Cho92] S. Chow. Finite element error estimates for a blast furnace gas flow problem. *SIAM Journal on Numerical Analysis*, 29 (3):769–780, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chronopoulos:1991:SIM

[Chr91] A. T. Chronopoulos. s-step iterative methods for (non)symmetric (in)definite linear systems. *SIAM Journal on Numerical Analysis*, 28(6): 1776–1789, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chui:1972:CGC

[Chu72] Charles K. Chui. Concerning Gaussian–Chebyshev quadrature errors. *SIAM Journal on Numerical Analysis*, 9(2): 237–240, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chu:1987:ETP

[Chu87] King-Wah Eric Chu. Exclusion theorems and the perturbation analysis of the generalized eigenvalue problem. *SIAM Journal on Numerical Analysis*, 24(5):1114–1125, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chu:1990:MEM

[Chu90] King-Wah Eric Chu. On multiple eigenvalues of matrices depending on several parameters. *SIAM Journal on Numerical Analysis*, 27(5):1368–1385, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chu:1992:NMI

[Chu92] Moody T. Chu. Numerical methods for inverse singular value problems. *SIAM Journal on Numerical Analysis*, 29 (3):885–903, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ciavaldini:1975:ANP

[Cia75] J. F. Ciavaldini. Analyse numérique d'un problème de Stefan à deux phases par une Mèthode d'Éléments finis [French: Numerical analysis of a problem of Stefan in two phases by a finite-element method]. *SIAM Journal on Numerical Analysis*, 12 (3):464–487, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ciment:1972:SMD

[Cim72] Melvyn Ciment. Stable matching of difference schemes. *SIAM Journal on Numerical Analysis*, 9 (4):695–701, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chawla:1975:BCI

[CJ75] M. M. Chawla and N. Jayarajan. Bivariate cardinal interpolation and cubature formulas. *SIAM Journal on Numerical Analysis*, 12(4):605–616, September 1975. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cabay:1976:PEM

[CJ76] S. Cabay and L. W. Jackson. A polynomial extrapolation method for finding limits and antilimits of vector sequences. *SIAM Journal on Numerical Analysis*, 13(5): 734–752, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cohen:1996:CAF

[CJ96] Gary Cohen and Patrick Joly. Construction and analysis of fourth-order finite difference schemes for the acoustic wave equation in nonhomogeneous media. *SIAM Journal on Numerical Analysis*, 33 (4):1266–1302, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24644`.

Chalmers:1974:RRH

[CJMT74] B. L. Chalmers, D. J. Johnson, F. T. Metcalf, and G. D. Taylor. Remarks on the rank of Hermite–Birkhoff interpolation. *SIAM Journal on Numerical Analysis*, 11(2): 254–259, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Caflisch:1997:UAS

[CJR97] Russel E. Caflisch, Shi Jin, and Giovanni Russo. Uniformly accurate schemes for hyperbolic systems with relaxation. *SIAM Journal on Numerical Analysis*, 34 (1):246–281, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26809`.

Chan:1991:SSO

[CJY91] Raymond H. Chan, Xiao-Qing Jin, and Man-Chung Yeung. The spectra of super-optimal circulant preconditioned Toeplitz systems. *SIAM Journal on Numerical Analysis*, 28(3):871–879, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1983:ADI

[CJZ83] Tony F. Chan, Kenneth R. Jackson, and Ben Ren Zhu. Alternating-direction incomplete factorizations. *SIAM Journal on Numerical Analysis*, 20(2):239–257, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cannon:1969:ASH

[CK69] J. R. Cannon and George H. Knightly. The approximation of the solution to the heat equation in a half-strip from data specified on the bounding characteristics. *SIAM Journal on Numerical Analysis*, 6(1):149–159, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1985:FME

[CK85a] Tony F. Chan and Tom Kerkhoven. Fourier methods with extended stability intervals for the Korteweg–de Vries equation. *SIAM Journal on Numerical Analysis*, 22 (3):441–454, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chawla:1985:UMF

[CK85b] M. M. Chawla and C. P. Katti. A uniform mesh finite difference method for a class of singular two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 22(3):561–565, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chiu:1992:ORK

[CK92] Chichia Chiu and David A. Kopriva. An optimal Runge–Kutta method for steady-state solutions of hyperbolic systems. *SIAM Journal on Numerical Analysis*, 29(2): 425–438, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chou:1998:CMB

[CK98] S. H. Chou and D. Y. Kwak. A covolume method based on rotated bilinears for the generalized Stokes problem. *SIAM Journal on Numerical Analysis*, 35(2): 494–507, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29996`.

Collins:1991:NAS

[CKL91] Charles Collins, David Kinderlehrer, and Mitchell Luskin. Numerical approximation of the solution of a variational problem with a double well potential. *SIAM Journal on Numerical Analysis*, 28(2): 321–332, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cahlon:1995:SSH

[CKS95] Baruch Cahlon, Devadatta M. Kulkarni, and Peter Shi. Stepwise stability for the heat equation with a nonlocal constraint. *SIAM Journal on Numerical Analysis*, 32(2): 571–593, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chou:1998:MCM

[CKV98] So-Hsiang Chou, Do Y. Kwak, and Panayot S. Vassilevski. Mixed covolume methods for elliptic problems on triangular grids. *SIAM Journal on Numerical Analysis*, 35(5):1850–1861, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32128`.

Cheney:1964:GRA

[CL64] E. W. Cheney and H. L. Loeb. Generalized rational approximation. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??):11–25, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic).

Crouzeix:1984:CVS

[CL84] M. Crouzeix and F. J. Lisbona. The convergence of variable-stepsize, variable-formula, multistep methods. *SIAM Journal on Numerical Analysis*, 21(3):512–534, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Caflisch:1989:CVM

[CL89] Russel E. Caflisch and John S. Lowengrub. Convergence of the vortex method for vortex sheets. *SIAM Journal on Numerical Analysis*, 26(5):1060–1080, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cannon:1990:PEE

[CL90] J. R. Cannon and Yanping Lin. A priori L^2 error estimates for finite-element methods for nonlinear diffusion equations with memory. *SIAM Journal on Numerical Analysis*, 27(3):595–607, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Coleman:1992:GQC

[CL92] Thomas F. Coleman and Yuying Li. A global and quadratically convergent method for linear L_∞ problems. *SIAM Journal on Numerical Analysis*, 29(4):1166–1186, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Clenshaw:1964:CBP

[Cle64] C. W. Clenshaw. A comparison of "Best" polynomial approximations with truncated Chebyshev series expansions. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??):26–37, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic).

Clements:1981:BIP

[Cle81] D. L. Clements. A boundary integral procedure for the numerical solution of a class of mixed boundary value problems. *SIAM Journal on Nu-*

merical Analysis, 18(4):664–680, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Clements:1990:CPP

[Cle90] John C. Clements. Convexity-preserving piecewise rational cubic interpolation. *SIAM Journal on Numerical Analysis*, 27(4):1016–1023, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cline:1965:RGI

[Cli65] Randall E. Cline. Representations for the generalized inverse of sums of matrices. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):99–114, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Cline:1968:IRI

[Cli68] Randall E. Cline. Inverses of rank invariant powers of a matrix. *SIAM Journal on Numerical Analysis*, 5(1):182–197, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cline:1973:EMS

[Cli73] A. K. Cline. An elimination method for the solution of linear least squares problems. *SIAM Journal on Numerical Analysis*, 10(2):283–289, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cline:1976:DMU

[Cli76] A. K. Cline. A descent method for the uniform solution to over-determined systems of linear equations. *SIAM Journal on Numerical Analysis*, 13(3):293–309, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Calvo:1987:SVS

[CLM87] M. Calvo, F. Lisbona, and J. Montijano. On the stability of variable-stepsize Nordsieck BDF methods. *SIAM Journal on Numerical Analysis*, 24(4):844–854, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Calvo:1989:SIV

[CLM89] M. Calvo, F. Lisbona, and J. Montijano. On the stability of interpolatory variable-stepsize Adams methods in Nordsieck form. *SIAM Journal on Numerical Analysis*, 26(4):946–962, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Catte:1992:ISS

[CLMC92] Francine Catté, Pierre-Louis Lions, Jean-Michel Morel, and Tomeu Coll. Image selective smoothing and edge detection by nonlinear diffusion. *SIAM Journal on Numerical Analysis*, 29(1):182–193, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cai:1994:FOS

[CLMM94] Z. Cai, R. Lazarov, T. A. Manteuffel, and S. F. McCormick. First-order system least squares for second-order partial differential equations: Part I. *SIAM Journal on Numerical Analysis*, 31(6):1785–1799, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Colombeau:1989:MPS

[CLNP89] J. F. Colombeau, A. Y. LeRoux, A. Noussair, and B. Perrot. Microscopic profiles of shock waves and ambiguities in multiplications of distributions. *SIAM Journal on Numerical Analysis*, 26(4):871–883, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1986:SES

[CLS86] Tony F. Chan, Ding Lee, and Long Jun Shen. Stable explicit schemes for equations of the Schrödinger type. *SIAM Journal on Numerical Analysis*, 23(2):274–281, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cannon:1965:SPN

[CM65] J. R. Cannon and Keith Miller. Some problems in numerical analytic continuation. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):87–98, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Chalmers:1974:TLR

[CM74] Bruce L. Chalmers and Frederic T. Metcalf. Taylor-like remainder formulas for interpolation by arbitrary linear functionals. *SIAM Journal on Numerical Analysis*, 11(5): 950–964, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Coleman:1983:ESJ

[CM83] Thomas F. Coleman and Jorge J. Moré. Estimation of sparse Jacobian matrices and graph coloring problems. *SIAM Journal on Numerical Analysis*, 20(1):187–209, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chatelin:1984:ADE

[CM84] Françoise Chatelin and Willard L. Miranker. Aggregation/

disaggregation for eigenvalue problems. *SIAM Journal on Numerical Analysis*, 21(3): 567–582, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Calamai:1987:QNU

[CM87] Paul H. Calamai and Jorge J. Moré. Quasi-Newton updates with bounds. *SIAM Journal on Numerical Analysis*, 24(6): 1434–1441, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chin:1988:ABS

[CM88a] R. C. Y. Chin and Thomas A. Manteuffel. An analysis of block successive overrelaxation for a class of matrices with complex spectra. *SIAM Journal on Numerical Analysis*, 25(3):564–585, June 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Criscuolo:1988:CPF

[CM88b] Giuliana Criscuolo and Giuseppe Mastroianni. On the convergence of product formulas for the numerical evaluation of derivatives of Cauchy principal value integrals. *SIAM Journal on Numerical Analysis*, 25(3):713–727, June 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cai:1990:AFV

[CM90a] Zhi Qiang Cai and Steve McCormick. On the accuracy of the finite volume element method for diffusion equations on composite grids. *SIAM Journal on Numerical Analysis*, 27(3):636–655, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Childs:1990:CGM

[CM90b] P. N. Childs and K. W. Morton. Characteristic Galerkin methods for scalar conservation laws in one dimension. *SIAM Journal on Numerical Analysis*, 27(3):553–594, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cambanis:1992:TSM

[CM92] Stamatis Cambanis and Elias Masry. Trapezoidal stratified Monte Carlo integration. *SIAM Journal on Numerical Analysis*, 29(1):284–301, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1999:CLD

[CM99a] Tony F. Chan and Pep Mulet. On the convergence of the lagged diffusivity fixed point method in total variation image restoration. *SIAM Journal on Numerical Analysis*, 36(2):354–367, April 1999.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/32707.

Costantini:1999:PCE

[CM99b] Paolo Costantini and Carla Manni. A parametric cubic element with tension properties. *SIAM Journal on Numerical Analysis*, 36(2):607–628, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/32072.

Cai:1991:FVE

[CMM91] Zhiqiang Cai, Jan Mandel, and Steve McCormick. The finite volume element method for diffusion equations on general triangulations. *SIAM Journal on Numerical Analysis*, 28(2):392–402, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cai:1997:FOSb

[CMM97a] Z. Cai, T. A. Manteuffel, and S. F. McCormick. First-order system least squares for the Stokes equations, with application to linear elasticity. *SIAM Journal on Numerical Analysis*, 34(5):1727–1741, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27299.

Cai:1997:MMN

[CMM97b] Zhiqiang Cai, Jan Mandel, and Steve McCormick. Multigrid methods for nearly singular linear equations and eigenvalue problems. *SIAM Journal on Numerical Analysis*, 34(1):178–200, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26113.

Cai:1997:FOSa

[CMM97c] Zhiqiang Cai, Thomas A. Manteuffel, and Stephen F. McCormick. First-order system least squares for second-order partial differential equations: Part II. *SIAM Journal on Numerical Analysis*, 34(2):425–454, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26606.

Cai:1998:FOS

[CMMP98] Zhiqiang Cai, Thomas A. Manteuffel, Stephen F. McCormick, and Seymour V. Parter. First-order system least squares (FOSLS) for planar linear elasticity: Pure traction problem. *SIAM Journal on Numerical Analysis*, 35(1):320–335, February 1998. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/29493.

Cline:1979:ECN

[CMSW79] A. K. Cline, C. B. Moler, G. W. Stewart, and J. H. Wilkinson. An estimate for the condition number of a matrix. *SIAM Journal on Numerical Analysis*, 16(2): 368–375, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chu:1988:IFA

[CN88] Moody T. Chu and Larry K. Norris. Isospectral flows and abstract matrix factorizations. *SIAM Journal on Numerical Analysis*, 25(6):1383–1391, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chang:1997:LSF

[CN97] C. L. Chang and John J. Nelson. Least-squares finite element method for the Stokes problem with zero residual of mass conservation. *SIAM Journal on Numerical Analysis*, 34(2): 480–489, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27336.

Chan:1993:FBP

[CNP93] Raymond H. Chan, James G. Nagy, and Robert J. Plemmons. FFT-based preconditioners for Toeplitz-block least squares problems. *SIAM Journal on Numerical Analysis*, 30(6):1740–1768, December 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Clenshaw:1980:UAE

[CO80] C. W. Clenshaw and F. W. J. Olver. An unrestricted algorithm for the exponential function. *SIAM Journal on Numerical Analysis*, 17(2): 310–331, April 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Clenshaw:1987:LIA

[CO87] C. W. Clenshaw and F. W. J. Olver. Level-index arithmetic operations. *SIAM Journal on Numerical Analysis*, 24(2): 470–485, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cockburn:1989:QSS

[Coc89] Bernardo Cockburn. Quasimonotone schemes for scalar conservation laws. Part I. *SIAM Journal on Numerical Analysis*, 26(6):1325–1341, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cockburn:1990:QSSa

[Coc90a] Bernardo Cockburn. Quasi-monotone schemes for scalar conservation laws. Part II. *SIAM Journal on Numerical Analysis*, 27(1):247–258, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cockburn:1990:QSSb

[Coc90b] Bernardo Cockburn. Quasi-monotone schemes for scalar conservation laws. Part III. *SIAM Journal on Numerical Analysis*, 27(1):259–276, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cohen:1971:NTC

[Coh71] Edgar A. Cohen, Jr. Note on a truncated Chebyshev series modified to match function values at interval endpoints. *SIAM Journal on Numerical Analysis*, 8(4):754–756, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cohen:1972:RCS

[Coh72] Arthur I. Cohen. Rate of convergence of several conjugate gradient algorithms. *SIAM Journal on Numerical Analysis*, 9(2):248–259, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Collins:1998:CRI

[Col98] Charles R. Collins. Convergence of a reduced integration method for computing microstructures. *SIAM Journal on Numerical Analysis*, 35(3):1271–1298, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30554`.

Conn:1973:COU

[Con73] Andrew R. Conn. Constrained optimization using a nondifferentiale penalty function. *SIAM Journal on Numerical Analysis*, 10(4):760–784, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Conn:1976:LPN

[Con76] A. R. Conn. Linear programming via a nondifferentiable penalty function. *SIAM Journal on Numerical Analysis*, 13(1):145–154, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cooke:1972:SSI

[Coo72] Charlie H. Cooke. On stiffly stable implicit linear multistep methods. *SIAM Journal on Numerical Analysis*, 9(1):29–34, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cooper:1978:OCG

[Coo78] G. J. Cooper. The order of convergence of general linear methods for ordinary differential equations. *SIAM Journal on Numerical Analysis*, 15(4): 643–661, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cooper:1981:EEG

[Coo81] G. J. Cooper. Error estimates for general linear methods for ordinary differential equations. *SIAM Journal on Numerical Analysis*, 18(1): 65–82, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). In SIGNUM Meeting on Numerical Ordinary Differential Equations.

Cope:1990:CPM

[Cop90] Davis K. Cope. Convergence of piessens' method for numerical inversion of the Laplace transform on the real line. *SIAM Journal on Numerical Analysis*, 27(5):1345–1354, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Conca:1998:AAR

[COP98] Carlos Conca, Axel Osses, and Jacques Planchard. Asymptotic analysis relating spectral models in fluid-solid vibrations. *SIAM Journal on Numerical Analysis*, 35 (3):1020–1048, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30480`.

Corradi:1981:NSS

[Cor81] Corrado Corradi. A note on the solution of separable nonlinear least-squares problems with separable nonlinear equality constraints. *SIAM Journal on Numerical Analysis*, 18(6):1134–1138, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cornelius:1983:AIA

[Cor83] Herbert Cornelius. On the acceleration of an interval-arithmetic iteration method. *SIAM Journal on Numerical Analysis*, 20(5):1010–1022, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Corrias:1996:FLF

[Cor96] Lucilla Corrias. Fast Legendre–Fenchel transform and applications to Hamilton–Jacobi equations and conservation laws. *SIAM Journal on Numerical Analysis*, 33(4): 1534–1558, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http:/`

/epubs.siam.org/sam-bin/dbq/article/26020.

Costello:1971:ASD

[Cos71] George A. Costello. The approximate solution of the Dirichlet problem by means of integral equations. *SIAM Journal on Numerical Analysis*, 8(1):135–136, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cosnard:1979:BSA

[Cos79] M. Y. Cosnard. On the behavior of successive approximations. *SIAM Journal on Numerical Analysis*, 16(2):300–310, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cox:1984:MSS

[Cox84] Dennis D. Cox. Multivariate smoothing spline functions. *SIAM Journal on Numerical Analysis*, 21(4):789–813, August 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cranley:1976:RNT

[CP76] R. Cranley and T. N. L. Patterson. Randomization of number theoretic methods for multiple integration. *SIAM Journal on Numerical Analysis*, 13(6):904–914, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Conn:1977:PFM

[CP77] Andrew R. Conn and Tomasz Pietrzykowski. A penalty function method converging directly to a constrained optimum. *SIAM Journal on Numerical Analysis*, 14(2):348–375, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cooper:1991:ADC

[CP91a] K. D. Cooper and P. M. Prenter. Alternating direction collocation for separable elliptic partial differential equations. *SIAM Journal on Numerical Analysis*, 28(3):711–727, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Coron:1991:NPK

[CP91b] F. Coron and B. Perthame. Numerical passage from kinetic to fluid equations. *SIAM Journal on Numerical Analysis*, 28(1):26–42, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Coquel:1998:REA

[CP98] Frédéric Coquel and Benoît Perthame. Relaxation of energy and approximate Riemann solvers for general pressure laws in fluid dynamics. *SIAM Journal on Numerical Analysis*, 35(6): 2223–2249, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31852`.

Canuto:1982:EES

[CQ82] C. Canuto and A. Quarteroni. Error estimates for spectral and pseudospectral approximations of hyperbolic equations. *SIAM Journal on Numerical Analysis*, 19(3): 629–642, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chawla:1976:MVA

[CR76] M. M. Chawla and T. R. Ramakrishnan. Minimum variance approximate formulas. *SIAM Journal on Numerical Analysis*, 13(1):113–128, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cope:1979:BSL

[CR79] J. E. Cope and B. W. Rust. Bounds on solutions of linear systems with inaccurate data. *SIAM Journal on Numerical Analysis*, 16(6):950–963, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cottet:1984:PMO

[CR84] G.-H. Cottet and P.-A. Raviart. Particle methods for the one-dimensional Vlasov–Poisson equations. *SIAM Journal on Numerical Analysis*, 21(1):52–76, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1986:GDB

[CR86] Tony F. Chan and Diana C. Resasco. Generalized deflated block-elimination. *SIAM Journal on Numerical Analysis*, 23(5):913–924, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cline:1990:CTD

[CR90] A. K. Cline and R. J. Renka. A constrained two-dimensional triangulation and the solution of closest node problems in the presence of barriers. *SIAM Journal on Numerical Analysis*, 27(5): 1305–1321, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Csendes:1997:SDS

[CR97] T. Csendes and D. Ratz. Subdivision direction selection in interval methods for global optimization. *SIAM Journal on Numerical Analysis*, 34(3):922–938, June 1997. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28152.

Crawford:1976:SGE

[Cra76] C. R. Crawford. A stable generalized eigenvalue problem. *SIAM Journal on Numerical Analysis*, 13(6):854–860, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See errata [Cra78].

Crawford:1978:ESG

[Cra78] C. R. Crawford. Errata: "A Stable Generalized Eigenvalue Problem" [SIAM J. Numer. Anal. **13** (1976), no. 6, 854–860]. *SIAM Journal on Numerical Analysis*, 15(5): 1070, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [Cra76].

Cryer:1967:DAG

[Cry67] C. W. Cryer. The difference analogue of Gauss' theorem. *SIAM Journal on Numerical Analysis*, 4(2):155–162, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cryer:1974:HSM

[Cry74] Colin W. Cryer. Highly stable multistep methods for retarded differential equations. *SIAM Journal on Numerical Analysis*, 11(4):788–797, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chartres:1972:GTC

[CS72] Bruce Chartres and Robert Stepleman. A general theory of convergence for numerical methods. *SIAM Journal on Numerical Analysis*, 9 (3):476–492, September 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chartres:1974:AOC

[CS74a] Bruce A. Chartres and Robert S. Stepleman. Actual order of convergence of Runge–Kutta methods on differential equations with discontinuities. *SIAM Journal on Numerical Analysis*, 11(6): 1193–1206, December 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chui:1974:S

[CS74b] Charles K. Chui and Philip W. Smith. On $H^{m,\infty}$-splines. *SIAM Journal on Numerical Analysis*, 11(3):554–558, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chartres:1975:OCL

[CS75] Bruce A. Chartres and Robert S. Stepleman. Order of convergence of linear multistep methods for functional differential equations. *SIAM*

Journal on Numerical Analysis, 12(6):876–886, December 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1987:SAD

[CS87] Tony F. Chan and Long Jun Shen. Stability analysis of difference schemes for variable coefficient Schrödinger type equations. *SIAM Journal on Numerical Analysis*, 24(2): 336–349, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Costabel:1990:CFB

[CS90] Martin Costabel and Ernst P. Stephan. Coupling of finite and boundary element methods for an elastoplastic interface problem. *SIAM Journal on Numerical Analysis*, 27 (5):1212–1226, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cockburn:1994:NSC

[CS94] Bernardo Cockburn and Chi-Wang Shu. Nonlinearly stable compact schemes for shock calculations. *SIAM Journal on Numerical Analysis*, 31(3): 607–627, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carstensen:1996:ABE

[CS96] Carsten Carstensen and Ernst P. Stephan. Adaptive boundary element methods for some first kind integral equations. *SIAM Journal on Numerical Analysis*, 33(6): 2166–2183, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25350`.

Cockburn:1998:LDG

[CS98] Bernardo Cockburn and Chi-Wang Shu. The local discontinuous Galerkin method for time-dependent convection-diffusion systems. *SIAM Journal on Numerical Analysis*, 35(6):2440–2463, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31671`.

Chapelle:1999:SFE

[CS99] Dominique Chapelle and Rolf Stenberg. Stabilized finite element formulations for shells in a bending dominated state. *SIAM Journal on Numerical Analysis*, 36(1):32–73, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30291`.

Carasso:1978:DRR

[CSH78] Alfred S. Carasso, James G. Sanderson, and James M. Hyman. Digital removal of random media image degradations by solving the diffusion equation backwards in time. *SIAM Journal on Numerical Analysis*, 15(2): 344–367, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cano:1997:EGN

[CSS97] B. Cano and J. M. Sanz-Serna. Error growth in the numerical integration of periodic orbits, with application to Hamiltonian and reversible systems. *SIAM Journal on Numerical Analysis*, 34 (4):1391–1417, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28115`.

Cryer:1972:NSV

[CT72] Colin W. Cryer and Lucio Tavernini. The numerical solution of Volterra functional differential equations by Euler's method. *SIAM Journal on Numerical Analysis*, 9(1): 105–129, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carlson:1983:DBE

[CT83] B. C. Carlson and John Todd. The degenerating behavior of elliptic functions. *SIAM Journal on Numerical Analysis*, 20(6):1120–1129, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Charrier:1986:FTM

[CT86] P. Charrier and B. Tessieras. On front-tracking methods applied to hyperbolic systems of nonlinear conservation laws. *SIAM Journal on Numerical Analysis*, 23(3): 461–472, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cullum:1971:NDR

[Cul71] Jane Cullum. Numerical differentiation and regularization. *SIAM Journal on Numerical Analysis*, 8(2): 254–265, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Curtiss:1966:SDP

[Cur66] J. H. Curtiss. Solutions of the Dirichlet problem in the plane by approximation with Faber polynomials. *SIAM Journal on Numerical Analysis*, 3(2): 204–228, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cuyt:1987:RCS

[Cuy87] A. Cuyt. A recursive computation scheme for multivariate rational interpolants. *SIAM Journal on Numerical Analysis*, 24(1):228–239, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cooper:1972:SER

[CV72] G. J. Cooper and J. H. Verner. Some explicit Runge–Kutta methods of high order. *SIAM Journal on Numerical Analysis*, 9(3):389–405, September 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Carstensen:1999:ERD

[CV99] Carsten Carstensen and Rüdiger Verfürth. Edge residuals dominate A posteriori error estimates for low order finite element methods. *SIAM Journal on Numerical Analysis*, 36(5): 1571–1587, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32334`.

Carroll:1976:AAI

[CW76] M. P. Carroll and W. R. Woodward. An algorithm for approximate integration using near best approximates. *SIAM Journal on Numerical Analysis*, 13(1): 104–108, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cruickshank:1978:CEB

[CW78] D. M. Cruickshank and K. Wright. Computable error bounds for polynomial collocation methods. *SIAM Journal on Numerical Analysis*, 15 (1):134–151, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cai:1993:MSA

[CW93] Xiao-Chuan Cai and Olof B. Widlund. Multiplicative Schwarz algorithms for some nonsymmetric and indefinite problems. *SIAM Journal on Numerical Analysis*, 30 (4):936–952, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Cai:1996:AMC

[CW96] Wei Cai and Jianzhong Wang. Adaptive multiresolution collocation methods for initial boundary value problems of nonlinear PDEs. *SIAM Journal on Numerical Analysis*, 33 (3):937–970, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chiu:1997:AMH

[CW97] Chichia Chiu and Noel Walkington. An ADI method for hysteretic reaction-diffusion systems. *SIAM Journal on Numerical Analysis*, 34 (3):1185–1206, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27018`.

Chen:1998:PGI

[CX98] Zhongying Chen and Yuesheng Xu. The Petrov–Galerkin and iterated Petrov–Galerkin methods for second-kind integral equations. *SIAM Journal on Numerical Analysis*, 35 (1):406–434, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29721`.

Chung:1977:LAU

[CY77] K. C. Chung and T. H. Yao. On lattices admitting unique Lagrange interpolations. *SIAM Journal on Numerical Analysis*, 14(4):735–743, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1992:CPC

[CY92] Raymond H. Chan and Man-Chung Yeung. Circulant preconditioners constructed from kernels. *SIAM Journal on Numerical Analysis*, 29(4): 1093–1103, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chan:1993:CPC

[CY93] Raymond H. Chan and Man-Chung Yeung. Circulant preconditioners for complex Toeplitz matrices. *SIAM Journal on Numerical Analysis*, 30(4):1193–1207, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Drakopoulos:1999:GCS

[DAB99] V. Drakopoulos, N. Argyropoulos, and A. Böhm. Generalized computation of Schröder iteration functions to motivate families of Julia and Mandelbrot-like sets. *SIAM Journal on Numerical Analysis*, 36(2):417–435, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31736`.

Dagnino:1986:ESR

[Dag86] Catterina Dagnino. Extensions of some results for interpolatory product integration rules to rules not necessarily of interpolatory type. *SIAM Journal on Numerical Analysis*, 23(6):1284–1289, December 1986. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Dahmen:1980:MBS

[Dah80] Wolfgang Dahmen. On multivariate B-splines. *SIAM Journal on Numerical Analysis*, 17 (2):179–191, April 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dahlquist:1983:OLM

[Dah83] Germund Dahlquist. On one-leg multistep methods. *SIAM Journal on Numerical Analysis*, 20(6):1130–1138, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dai:1992:UST

[Dai92] Wei Zhong Dai. An unconditionally stable three-level explicit difference scheme for the Schrödinger equation with a variable coefficient. *SIAM Journal on Numerical Analysis*, 29(1):174–181, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Daniel:1967:CGM

[Dan67] James W. Daniel. The conjugate gradient method for linear and nonlinear operator equations. *SIAM Journal on Numerical Analysis*, 4 (1):10–26, March 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Daniel:1970:CCC

[Dan70] James W. Daniel. A correction concerning the convergence rate for the conjugate gradient method. *SIAM Journal on Numerical Analysis*, 7 (2):277–280, June 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Daniel:1973:PSL

[Dan73] James W. Daniel. On perturbations in systems of linear inequalities. *SIAM Journal on Numerical Analysis*, 10 (2):299–307, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Daniel:1975:RPL

[Dan75] James W. Daniel. Remarks on perturbations in linear inequalities. *SIAM Journal on Numerical Analysis*, 12(5): 770–772, October 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Daripa:1991:NTO

[Dar91] Prabir Daripa. A new theory for one-dimensional adaptive grid generation and its applications. *SIAM Journal on Numerical Analysis*, 28(6): 1635–1660, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Davidon:1980:CAC

[Dav80] William C. Davidon. Conic approximations and collinear scalings for optimizers. *SIAM Journal on Numerical Analysis*, 17(2):268–281, April 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Davies:1994:NSC

[Dav94] Penny J. Davies. Numerical stability and convergence of approximations of retarded potential integral equations. *SIAM Journal on Numerical Analysis*, 31(3):856–875, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Davidson:1997:LSC

[Dav97] Bryan D. Davidson. Large-scale continuation and numerical bifurcation for partial differential equations. *SIAM Journal on Numerical Analysis*, 34(5):2008–2027, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27328`.

Dawson:1991:GMM

[Daw91] Clint N. Dawson. Godunov-mixed methods for advective flow problems in one space dimension. *SIAM Journal on Numerical Analysis*, 28 (5):1282–1309, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dawson:1993:GMM

[Daw93] Clint Dawson. Godunov-mixed methods for advection-diffusion equations in multidimensions. *SIAM Journal on Numerical Analysis*, 30 (5):1315–1332, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dawson:1998:AUM

[Daw98] Clint Dawson. Analysis of an upwind-mixed finite element method for nonlinear contaminant transport equations. *SIAM Journal on Numerical Analysis*, 35 (5):1709–1724, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25942`.

Dax:1985:SRL

[Dax85] Achiya Dax. Successive refinement of large multicell models. *SIAM Journal on Numerical Analysis*, 22(5): 865–887, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dunham:1980:MAS

[DC80] Charles B. Dunham and Charles R. Crawford. Minimax approximation by a semicircle. *SIAM Journal on Numerical Analysis*, 17(1):63–65, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deFigueiredo:1990:SDP

[dC90] Rui J. P. de Figueiredo and Guanrong Chen. PDL_g splines defined by partial differential operators with initial and boundary value conditions. *SIAM Journal on Numerical Analysis*, 27(2): 519–528, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Douglas:1970:GMP

[DD70] Jim Douglas, Jr. and Todd Dupont. Galerkin methods for parabolic equations. *SIAM Journal on Numerical Analysis*, 7(4):575–626, December 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deBoor:1986:SFD

[dd86] C. de Boor and F. de Hoog. Stability of finite difference schemes for two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 23(5):925–935, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Douglas:1993:UCT

[DD93] Craig C. Douglas and Jim Douglas, Jr. A unified convergence theory for abstract multigrid or multilevel algorithms, serial and parallel. *SIAM Journal on Numerical Analysis*, 30(1):136–158, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dawson:1994:EIC

[DD94] Clint N. Dawson and Todd F. Dupont. Explicit/implicit, conservative domain decomposition procedures for parabolic problems based on block-centered finite differences. *SIAM Journal on Numerical Analysis*, 31(4):1045–1061, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dubuc:1996:EBE

[DD96] B. Dubuc and S. Dubuc. Error bounds on the estimation of fractal dimension. *SIAM Journal on Numerical Analysis*, 33(2): 602–626, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deBoor:1983:SOS

[ddd83] C. de Boor, F. de Hoog, and H. B. de Keller. The stability of one-step schemes for

first-order two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 20(6):1139–1146, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Douglas:1979:IIT

[DDE79] Jim Douglas, Jr., Todd Dupont, and Richard E. Ewing. Incomplete iteration for time-stepping a Galerkin method for a quasilinear parabolic problem. *SIAM Journal on Numerical Analysis*, 16(3):503–522, June 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Deift:1991:BSV

[DDLT91] Percy Deift, James Demmel, Luen Chau Li, and Carlos Tomei. The bidiagonal singular value decomposition and Hamiltonian mechanics. *SIAM Journal on Numerical Analysis*, 28(5):1463–1516, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dahmen:1980:MDS

[DDS80] W. Dahmen, R. De Vore, and K. Scherer. Multidimensional spline approximation. *SIAM Journal on Numerical Analysis*, 17(3):380–402, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

delaValleePoussin:1968:ARA

[de 68] F. de la Vallée Poussin. An accelerated relaxation algorithm for iterative solution of elliptic equations. *SIAM Journal on Numerical Analysis*, 5(2):340–351, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

DePillis:1973:GSC

[De 73] John De Pillis. Gauss–Seidel convergence for operators on Hilbert space. *SIAM Journal on Numerical Analysis*, 10(1):112–122, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deBoor:1977:PCB

[de 77] Carl de Boor. Package for calculating with B-splines. *SIAM Journal on Numerical Analysis*, 14(3):441–472, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deBoor:1978:CNC

[de 78a] Carl de Boor. A comment on “Numerical Comparisons of Algorithms for Polynomial and Rational Multivariate Approximations” [SIAM J. Numer. Anal. **15** (1978), no. 6, 1197–1207, by J. N. Henry, M. S. Henry and D. Schmidt]. *SIAM Journal*

on *Numerical Analysis*, 15(6): 1208–1211, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [HHS78].

dePillis:1978:FCI

[de 78b] John de Pillis. Faster convergence for iterative solutions to systems via three-part splittings. *SIAM Journal on Numerical Analysis*, 15(5): 888–911, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deBoor:1980:DBM

[de 80] Carl de Boor. Dichotomies for band matrices. *SIAM Journal on Numerical Analysis*, 17(6):894–907, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deGee:1986:AEM

[de 86] Maarten de Gee. Asymptotic expansions for the midpoint rule applied to delay differential equations. *SIAM Journal on Numerical Analysis*, 23(6):1254–1272, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deBoor:1988:CBS

[de 88] Carl de Boor. The condition of the B-spline basis for polynomials. *SIAM Journal on Numerical Analysis*, 25(1): 148–152, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sturler:1999:TSO

[de 99] Eric de Sturler. Truncation strategies for optimal Krylov subspace methods. *SIAM Journal on Numerical Analysis*, 36(3):864–889, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31595`.

Donaldson:1972:UAQ

[DE72] J. D. Donaldson and David Elliott. A unified approach to quadrature rules with asymptotic estimates of their remainders. *SIAM Journal on Numerical Analysis*, 9 (4):573–602, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dow:1979:NSS

[DE79] M. L. Dow and David Elliott. The numerical solution of singular integral equations over $(-1, 1)$. *SIAM Journal on Numerical Analysis*, 16(1): 115–134, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dorobantu:1998:WBN

[DE98] Mihai Dorobantu and Björn Engquist. Wavelet-based numerical homogenization. *SIAM Journal on Numerical Analysis*, 35(2):540–559, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29888`.

Dejon:1967:NSD

[Dej67] B. Dejon. Numerical stability of difference equations with matrix coefficients. *SIAM Journal on Numerical Analysis*, 4(1):119–128, March 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dellwo:1988:ARA

[Del88] David R. Dellwo. Accelerated refinement with applications to integral equations. *SIAM Journal on Numerical Analysis*, 25(6):1327–1339, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dellwo:1989:ASR

[Del89] David R. Dellwo. Accelerated spectral refinement with applications to integral operators. *SIAM Journal on Numerical Analysis*, 26(5):1184–1193, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Delbourgo:1993:ARI

[Del93] Roger Delbourgo. Accurate C^2 rational interpolants in tension. *SIAM Journal on Numerical Analysis*, 30(2):595–607, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

DeLillo:1994:ANC

[DeL94] Thomas K. DeLillo. The accuracy of numerical conformal mapping methods: A survey of examples and results. *SIAM Journal on Numerical Analysis*, 31(3):788–812, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Demko:1976:LPS

[Dem76] Stephen Demko. Lacunary polynomial spline interpolation. *SIAM Journal on Numerical Analysis*, 13(3):369–381, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Demko:1977:IBM

[Dem77] Stephen Demko. Inverses of band matrices and local convergence of spline projections. *SIAM Journal on Numerical Analysis*, 14(4):616–619, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Demmel:1983:CNE

[Dem83] James Demmel. The condition number of equivalence transformations that block diagonalize matrix pencils. *SIAM Journal on Numerical Analysis*, 20(3):599–610, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Demmel:1987:SPS

[Dem87] James Weldon Demmel. The smallest perturbation of a submatrix which lowers the rank and constrained total least squares problems. *SIAM Journal on Numerical Analysis*, 24(1):199–206, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dennis:1967:NMN

[Den67a] J. E. Dennis, Jr. On Newton's method and nonlinear simultaneous displacements. *SIAM Journal on Numerical Analysis*, 4(1):103–108, March 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dennis:1967:SNM

[Den67b] J. E. Dennis, Jr. A stationary Newton method for nonlinear functional equations. *SIAM Journal on Numerical Analysis*, 4(2):222–232, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dennis:1969:KHN

[Den69] J. E. Dennis, Jr. On the Kantorovich hypothesis for Newton's method. *SIAM Journal on Numerical Analysis*, 6(3):493–507, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dendy:1974:TMG

[Den74a] J. E. Dendy. Two methods of Galerkin type achieving optimum L^2 rates of convergence for first order hyperbolics. *SIAM Journal on Numerical Analysis*, 11(3):637–653, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dendy:1974:PGM

[Den74b] J. E. Dendy, Jr. Penalty Galerkin methods for partial differential equations. *SIAM Journal on Numerical Analysis*, 11(3):604–636, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dendy:1975:ASG

[Den75] J. E. Dendy, Jr. An analysis of some Galerkin schemes for the solution of nonlinear time-dependent problems. *SIAM Journal on Numerical Analysis*, 12(4):541–565, September 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dendy:1977:ADMb

[Den77a] J. E. Dendy, Jr. An alternating direction method for Schrödinger's equation. *SIAM Journal on Numerical Analysis*, 14(6):1028–1032, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dendy:1977:ADMa

[Den77b] J. E. Dendy, Jr. Alternating direction methods for nonlinear time-dependent problems. *SIAM Journal on Numerical Analysis*, 14(2): 313–326, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dendy:1977:GMS

[Den77c] J. E. Dendy, Jr. Galerkin's method for some highly nonlinear problems. *SIAM Journal on Numerical Analysis*, 14 (2):327–347, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dershem:1971:ABE

[Der71] Herbert L. Dershem. Approximation of the Bessel eigenvalue problem by finite differences. *SIAM Journal on Numerical Analysis*, 8(4):706–716, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duff:1976:GND

[DER76] Iain S. Duff, A. M. Erisman, and J. K. Reid. On George's nested dissection method. *SIAM Journal on Numerical Analysis*, 13(5): 686–695, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Descloux:1972:FEM

[Des72] Jean Descloux. On finite element matrices. *SIAM Journal on Numerical Analysis*, 9 (2):260–265, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Descloux:1981:ENR

[Des81] Jean Descloux. Essential numerical range of an operator with respect to a coercive form and the approximation of its spectrum by the Galerkin method. *SIAM Journal on Numerical Analysis*, 18(6):1128–1133, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dembo:1982:INM

[DES82] Ron S. Dembo, Stanley C. Eisenstat, and Trond Steihaug. Inexact Newton methods. *SIAM Journal on Numerical Analysis*, 19(2): 400–408, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dendy:1975:ADG

[DF75] J. E. Dendy, Jr. and G. Fairweather. Alternating-direction Galerkin methods for parabolic and hyperbolic problems on rectangular polygons. *SIAM Journal on Numerical Analysis*, 12(2):144–163, April 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See errata [DF76a].

Dendy:1976:EAD

[DF76a] J. E. Dendy, Jr. and G. Fairweather. Errata: "Alternating-Direction Galerkin Methods for Parabolic and Hyperbolic Problems on Rectangular Polygons" [SIAM J. Numer. Anal. **12** (1975), no. 2, 144–163]. *SIAM Journal on Numerical Analysis*, 13(4): 644, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [DF75].

Diamond:1976:CRM

[DF76b] Martin A. Diamond and Dulcinea L. V. Ferreira. On a cyclic reduction method for the solution of Poisson's equations. *SIAM Journal on Numerical Analysis*, 13(1): 54–70, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dellwo:1984:ASA

[DF84] David R. Dellwo and Morton B. Friedman. Accelerated spectral analysis of compact operators. *SIAM Journal on Numerical Analysis*, 21(6): 1115–1131, December 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dellwo:1991:API

[DF91] David R. Dellwo and Morton B. Friedman. Accelerated projection and iterated projection methods with applications to nonlinear integral equations. *SIAM Journal on Numerical Analysis*, 28(1): 236–250, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dupont:1974:TLG

[DFJ74] Todd Dupont, Graeme Fairweather, and J. Peter Johnson. Three-level Galerkin methods for parabolic equations. *SIAM Journal on Numerical Analysis*, 11(2): 392–410, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Deuflhard:1987:ENP

[DFK87] P. Deuflhard, B. Fiedler, and P. Kunkel. Efficient numerical pathfollowing beyond critical points. *SIAM Journal on Numerical Analysis*, 24(4): 912–927, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deVilliers:1981:CMN

[dG81] Noël de Villiers and David Glasser. A continuation method for nonlinear regression. *SIAM Journal on Numerical Analysis*, 18(6):1139–1154, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Du:1990:FEA

[DG90] Qiang Du and Max D. Gunzburger. Finite-element approximations of a ladyzhenskaya model for stationary incompressible viscous flow. *SIAM Journal on Numerical Analysis*, 27(1):1–19, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Don:1994:CLM

[DG94] Wai-Sun Don and David Gottlieb. The Chebyshev–Legendre method: Implementing Legendre methods on Chebyshev points. *SIAM Journal on Numerical Analysis*, 31(6):1519–1534, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Davis:1998:FEA

[DG98a] Timothy A. Davis and Eugene C. Gartland, Jr. Finite element analysis of the landau-de gennes minimization problem for liquid crystals. *SIAM Journal on Numerical Analysis*, 35(1):336–362, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29744`.

Don:1998:SSS

[DG98b] Wai Sun Don and David Gottlieb. Spectral simulation of supersonic reactive flows. *SIAM Journal on Numerical Analysis*, 35(6):2370–2384, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31896`.

Delahaye:1982:SLC

[DGB82] J. P. Delahaye and B. Germain-Bonne. The set of logarithmically convergent sequences cannot be accelerated. *SIAM Journal on Numerical Analysis*, 19(4):840–844, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Douglas:1966:MAD

[DGP66] Jim Douglas, Jr., A. O. Garder, and Carl Pearcy. Multistage alternating direction methods. *SIAM Journal on Numerical Analysis*, 3(4):570–581, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dutt:1996:FAP

[DGR96] A. Dutt, M. Gu, and V. Rokhlin. Fast algorithms for polynomial interpolation, integration, and differentiation. *SIAM Journal on Numerical Analysis*, 33(5):1689–1711, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duran:1991:FEM

[DGW91] Ricardo Durán, Adriana Ghioldi, and Noemí Wolanski. A finite element method for the Mindlin–Reissner plate model. *SIAM Journal on Numerical Analysis*, 28(4):1004–1014, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Donelson:1971:CCM

[DH71] John Donelson, III and Eldon Hansen. Cyclic composite multistep predictor-corrector methods. *SIAM Journal on Numerical Analysis*, 8(1): 137–157, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Deuflhard:1979:AIC

[DH79] P. Deuflhard and G. Heindl. Affine invariant convergence theorems for Newton's method and extensions to related methods. *SIAM Journal on Numerical Analysis*, 16(1): 1–10, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dyksen:1984:PCG

[DHLR84] W. R. Dyksen, E. N. Houstis, R. E. Lynch, and J. R. Rice. The performance of the collocation and Galerkin methods with Hermite bicubics. *SIAM Journal on Numerical Analysis*, 21(4):695–715, August 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hoog:1973:HOM

[dHW73] Frank de Hoog and Richard Weiss. High order methods for Volterra integral equations of the first kind. *SIAM Journal on Numerical Analysis*, 10 (4):647–664, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Diaz:1977:CGM

[Dia77] Julio Cesar Diaz. A collocation-Galerkin method for the two point boundary value problem using continuous piecewise polynomial spaces. *SIAM Journal on Numerical Analysis*, 14(5):844–858, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Diaz:1979:CGM

[Día79] Julio César Díaz. Collocation-H^{-1}-Galerkin method for parabolic problems with time dependent coefficients. *SIAM Journal on Numerical Analysis*, 16(6):911–922, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dierckx:1982:FAS

[Die82] Paul Dierckx. A fast algorithm for smoothing data on a rectangular grid while using spline functions. *SIAM Journal on Numerical Analysis*, 19(6):1286–1304, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Diener:1990:IDS

[Die90] Dwight Diener. Instability in the dimension of spaces of bivariate piecewise polynomials of degree $2r$ and smoothness order r. *SIAM Journal on Numerical Analysis*, 27 (2):543–551, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dieci:1992:NID

[Die92] Luca Dieci. Numerical integration of the differential Riccati equation and some related issues. *SIAM Journal on Numerical Analysis*, 29(3): 781–815, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dixon:1983:EEE

[Dix83] John D. Dixon. Estimating extremal eigenvalues and condition numbers of matrices. *SIAM Journal on Numerical Analysis*, 20(4):812–814, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dellnitz:1999:ACD

[DJ99] Michael Dellnitz and Oliver Junge. On the approximation of complicated dynamical behavior. *SIAM Journal on Numerical Analysis*, 36(2):491–515, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31300`.

Davis:1970:REP

[DK70] Chandler Davis and W. M. Kahan. The rotation of eigenvectors by a perturbation. III. *SIAM Journal on Numerical Analysis*, 7(1):1–46, March 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Decker:1980:NMSa

[DK80a] D. W. Decker and C. T. Kelley. Newton's method at singular points. I. *SIAM Journal on Numerical Analysis*, 17(1):

66–70, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Decker:1980:NMSb

[DK80b] D. W. Decker and C. T. Kelley. Newton's method at singular points. II. *SIAM Journal on Numerical Analysis*, 17 (3):465–471, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dax:1981:EMC

[DK81] A. Dax and S. Kaniel. The ELR method for computing the eigenvalues of a general matrix. *SIAM Journal on Numerical Analysis*, 18(4):597–605, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Decker:1982:CAN

[DK82] D. W. Decker and C. T. Kelley. Convergence acceleration for Newton's method at singular points. *SIAM Journal on Numerical Analysis*, 19(1): 219–229, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Decker:1985:BMC

[DK85] D. W. Decker and C. T. Kelley. Broyden's method for a class of problems having singular Jacobian at the root. *SIAM Journal on Numerical Analysis*, 22(3):566–574, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deBoor:1986:CLS

[dK86] C. de Boor and H.-O. Kreiss. On the condition of the linear systems associated with discretized BVPs of ODEs. *SIAM Journal on Numerical Analysis*, 23(5):936–939, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

De-kang:1999:ESC

[Dk99] Mao De-kang. Entropy satisfaction of a conservative shock-tracking method. *SIAM Journal on Numerical Analysis*, 36(2):529–550, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31975`.

Decker:1983:CRN

[DKK83] D. W. Decker, H. B. Keller, and C. T. Kelley. Convergence rates for Newton's method at singular points. *SIAM Journal on Numerical Analysis*, 20(2): 296–314, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dupont:1968:AFP

[DKR68] Todd Dupont, Richard P. Kendall, and H. H. Rachford, Jr. An approximate factorization procedure for solving self-adjoint elliptic difference equations. *SIAM Journal on Numerical Analysis*, 5 (3):559–573, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Davis:1982:NPD

[DKW82] Chandler Davis, W. M. Kahan, and H. F. Weinberger. Norm-preserving dilations and their applications to optimal error bounds. *SIAM Journal on Numerical Analysis*, 19(3):445–469, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dua:1973:FRD

[DL73] S. N. Dua and H. L. Loeb. Further remarks on the differential correction algorithm. *SIAM Journal on Numerical Analysis*, 10(1): 123–126, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duris:1975:CQR

[DL75] C. S. Duris and J. N. Lyness. Compound quadrature rules for the product of two functions. *SIAM Journal on Numerical Analysis*, 12(5):681–697, October 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Descloux:1982:FEM

[DL82] Jean Descloux and Mitchell Luskin. On a finite element method to solve the criticality eigenvalue problem for the transport equation. *SIAM Journal on Numerical Analysis*, 19(6):1208–1219, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dyn:1983:ISS

[DL83] Nira Dyn and David Levin. Iterative solution of systems originating from integral equations and surface interpolation. *SIAM Journal on Numerical Analysis*, 20(2): 377–390, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Deshpande:1990:SSF

[DL90] Lalita N. Deshpande and Balmohan V. Limaye. On the stability of singular finite rank methods. *SIAM Journal on Numerical Analysis*, 27(3): 792–803, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duncan:1991:JII

[DL91] D. B. Duncan and M. A. M. Lynch. Jacobi iteration in implicit difference schemes for the wave equation. *SIAM Journal on Numerical Analysis*, 28(6):1661–1679, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dieci:1995:CIT

[DL95] Luca Dieci and Jens Lorenz. Computation of invariant tori by the method of characteristics. *SIAM Journal on Numerical Analysis*, 32(5):1436–1474, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dahlquist:1983:STS

[DLN83] Germund G. Dahlquist, Werner Liniger, and Olavi Nevanlinna. Stability of two-step methods for variable integration steps. *SIAM Journal on Numerical Analysis*, 20 (5):1071–1085, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dyn:1982:CBI

[DLR82] N. Dyn, G. G. Lorentz, and S. D. Riemenschneider. Continuity of the Birkhoff interpolation. *SIAM Journal on Numerical Analysis*, 19(3): 507–509, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Daniel:1977:NMD

[DM77] James W. Daniel and Andrew J. Martin. Numerov's method with deferred corrections for two-point boundary-value problems. *SIAM Journal on Numerical Analysis*, 14(6):1033–1050, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Doss:1979:DAM

[DM79] Said Doss and Keith Miller. Dynamic ADI methods for elliptic equations. *SIAM Journal on Numerical Analysis*, 16(5):837–856, October 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dahmen:1982:LIM

[DM82] Wolfgang A. Dahmen and Charles A. Micchelli. On the linear independence of multivariate B-splines. I. triangulations of simploids. *SIAM Journal on Numerical Analysis*, 19(5):993–1012, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deHoog:1987:DWC

[dM87] F. R. de Hoog and R. M. M. Mattheij. On dichotomy and well conditioning in BVP. *SIAM Journal on Numerical Analysis*, 24(1):89–105, February 1987. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Douglas:1988:CIP

[DM88] Craig C. Douglas and Willard L. Miranker. Constructive interference in parallel algorithms. *SIAM Journal on Numerical Analysis*, 25(2): 376–398, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Devulder:1992:CNA

[DM92] Christophe Devulder and Martine Marion. A class of numerical algorithms for large time integration: The nonlinear Galerkin methods. *SIAM Journal on Numerical Analysis*, 29(2):462–483, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dahmen:1993:URE

[DM93] Wolfgang Dahmen and Charles A. Micchelli. Using the refinement equation for evaluating integrals of wavelets. *SIAM Journal on Numerical Analysis*, 30(2):507–537, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dempster:1995:PGC

[DM95] M. A. H. Dempster and R. R. Merkovsky. A practical geometrically convergent cutting plane algorithm. *SIAM Journal on Numerical Analysis*, 32 (2):631–644, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Destuynder:1998:EEB

[DM98] Philippe Destuynder and Brigitte Métivet. Explicit error bounds for a nonconforming finite element method. *SIAM Journal on Numerical Analysis*, 35(5): 2099–2115, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/30019.

Deutsch:1975:SAC

[DMP75] Frank Deutsch, John H. McCabe, and George M. Phillips. Some algorithms for computing best approximations from convex cones. *SIAM Journal on Numerical Analysis*, 12 (3):390–403, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duran:1992:AEE

[DMR92] Ricardo Durán, María Amelia Muschietti, and Rodolfo Rodríguez. Asymptotically exact error estimators for rectangular finite elements. *SIAM Journal on Numerical Analysis*, 29(1):78–88, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dongarra:1983:IAC

[DMW83] J. J. Dongarra, C. B. Moler, and J. H. Wilkinson. Improving the accuracy of computed eigenvalues and eigenvectors. *SIAM Journal on Numerical Analysis*, 20(1): 23–45, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://www.netlib.org/utk/people/JackDongarra/PAPERS/Improving-the-Accuracy-of-Computed-Eigenvalues-and-Eigenvectors.pdf. Cited in [?].

Duran:1989:PAS

[DN89] Ricardo G. Durán and Ricardo H. Nochetto. Pointwise accuracy of a stable Petrov–Galerkin approximation to the Stokes problem. *SIAM Journal on Numerical Analysis*, 26(6):1395–1406, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Du:1991:NAC

[DN91] Qiang Du and R. A. Nicolaides. Numerical analysis of a continuum model of phase transition. *SIAM Journal on Numerical Analysis*, 28 (5):1310–1322, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Deift:1983:ODE

[DNT83] P. Deift, T. Nanda, and C. Tomei. Ordinary differential equations and the symmetric eigenvalue problem. *SIAM Journal on Numerical Analysis*, 20(1):1–22, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Du:1998:ACC

[DNW98] Qiang Du, R. A. Nicolaides, and Xiaonan Wu. Analysis and convergence of a covolume approximation of the Ginzburg–Landau model of superconductivity. *SIAM Journal on Numerical Analysis*, 35(3):1049–1072, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/30285.

Deacon:1979:FEM

[DO79] Arthur G. Deacon and Stanley Osher. A finite element method for a boundary value problem of mixed type. *SIAM Journal on Numerical Analysis*, 16(5):756–778, October 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Delfour:1992:NAS

[DO92] M. C. Delfour and A. Ouansafi. Noniterative approximations to the solution of the matrix Riccati differential equation. *SIAM Journal on Numerical Analysis*, 29(6):1648–1693, December 1992. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dobrowolski:1980:CLF

[Dob80] Manfred Dobrowolski. L^∞-convergence of linear finite element approximation to nonlinear parabolic problems. *SIAM Journal on Numerical Analysis*, 17(5):663–674, October 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dobrowolski:1992:MFE

[Dob92] Manfred Dobrowolski. A mixed finite element method for approximating incompressible materials. *SIAM Journal on Numerical Analysis*, 29(2):365–389, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Doedel:1978:CFD

[Doe78] Eusebius J. Doedel. The construction of finite difference approximations to ordinary differential equations. *SIAM Journal on Numerical Analysis*, 15(3):450–465, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Doedel:1979:FDC

[Doe79] Eusebius J. Doedel. Finite difference collocation methods for nonlinear two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 16(2):173–185, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dolzmann:1999:NCR

[Dol99] Georg Dolzmann. Numerical computation of rank-one convex envelopes. *SIAM Journal on Numerical Analysis*, 36(5):1621–1635, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32558`.

Donnelly:1969:EMR

[Don69] J. D. P. Donnelly. Eigenvalues of membranes with reentrant corners. *SIAM Journal on Numerical Analysis*, 6(1):47–61, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Donnelly:1970:BES

[Don70] J. D. P. Donnelly. Bounds for the eigenvalues of self-adjoint operators. *SIAM Journal on Numerical Analysis*, 7(3):458–478, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Donaldson:1973:EUB

[Don73] J. D. Donaldson. Estimates of upper bounds for quadrature errors. *SIAM Journal* on *Numerical Analysis*, 10(1): 13–22, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dontchev:1981:EED

[Don81] Asen L. Dontchev. Error estimates for a discrete approximation to constrained control problems. *SIAM Journal on Numerical Analysis*, 18 (3):500–514, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Donat:1994:SEP

[Don94] Rosa Donat. Studies on error propagation for certain nonlinear approximations to hyperbolic equations: Discontinuities in derivatives. *SIAM Journal on Numerical Analysis*, 31(3):655–679, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Doob:1966:RBL

[Doo66] J. L. Doob. Remarks on the boundary limits of harmonic functions. *SIAM Journal on Numerical Analysis*, 3 (2):229–235, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dorr:1970:NSS

[Dor70] Fred W. Dorr. The numerical solution of singular perturbations of boundary value problems. *SIAM Journal on Numerical Analysis*, 7(2): 281–313, June 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dorr:1984:ATV

[Dor84] Milo R. Dorr. The approximation theory for the p-version of the finite element method. *SIAM Journal on Numerical Analysis*, 21(6): 1180–1207, December 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dorr:1986:ASE

[Dor86] Milo R. Dorr. The approximation of solutions of elliptic boundary-value problems via the p-version of the finite element method. *SIAM Journal on Numerical Analysis*, 23(1): 58–77, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dieci:1988:RTMa

[DOR88a] Luca Dieci, Michael R. Osborne, and Robert D. Russell. A Riccati transformation method for solving linear BVPs. I. theoretical aspects. *SIAM Journal on Numerical Analysis*, 25(5):1055–1073, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dieci:1988:RTMb

[DOR88b] Luca Dieci, Michael R. Osborne, and Robert D. Russell. A Riccati transformation method for solving linear BVPs. II. computational aspects. *SIAM Journal on Numerical Analysis*, 25(5):1074–1092, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dorfler:1996:CAA

[Dör96] Willy Dörfler. A convergent adaptive algorithm for Poisson's equation. *SIAM Journal on Numerical Analysis*, 33(3): 1106–1124, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dorfler:1999:UPE

[Dör99a] W. Dörfler. Uniform A priori estimates for singularly perturbed elliptic equations in multidimensions. *SIAM Journal on Numerical Analysis*, 36(6):1878–1900, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34132`.

Dorfler:1999:UEE

[Dör99b] W. Dörfler. Uniform error estimates for an exponentially fitted finite element method for singularly perturbed elliptic equations. *SIAM Journal on Numerical Analysis*, 36(6): 1709–1738, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34131`.

Douglas:1983:FDM

[Dou83] Jim Douglas, Jr. Finite difference methods for two-phase incompressible flow in porous media. *SIAM Journal on Numerical Analysis*, 20(4): 681–696, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Douglas:1984:MGA

[Dou84] Craig C. Douglas. Multigrid algorithms with applications to elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 21 (2):236–254, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Douglas:1985:SPS

[Dou85] Jim Douglas, Jr. Superconvergence in the pressure in the simulation of miscible displacement. *SIAM Journal on Numerical Analysis*, 22(5): 962–969, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Doucette:1993:CMN

[Dou93] Robert L. Doucette. A collocation method for the numerical solution of laplace's equation with nonlinear boundary conditions on a polygon. *SIAM Journal on Numerical Analysis*, 30(3):717–732, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Deuflhard:1992:AMI

[DP92] Peter Deuflhard and Florian A. Potra. Asymptotic mesh independence of Newton–Galerkin methods via a refined Mysovskiĭ theorem. *SIAM Journal on Numerical Analysis*, 29(5):1395–1412, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Davini:1998:RNC

[DP98] Cesare Davini and Igino Pitacco. Relaxed notions of curvature and a lumped strain method for elastic plates. *SIAM Journal on Numerical Analysis*, 35(2):677–691, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29610`.

Delfour:1987:ANP

[DPZ87] M. C. Delfour, G. Payre, and J.-P. Zolésio. Approximation of nonlinear problems associated with radiating bodies in space. *SIAM Journal on Numerical Analysis*, 24(5):1077–1094, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Davis:1965:ISA

[DR65] Philip J. Davis and Philip Rabinowitz. Ignoring the singularity in approximate integration. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(3):367–383, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

denHeijer:1981:SAC

[dR81] C. den Heijer and W. C. Rheinboldt. On steplength algorithms for a class of continuation methods. *SIAM Journal on Numerical Analysis*, 18(5):925–948, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Douglas:1982:NMC

[DR82] Jim Douglas, Jr. and Thomas F. Russell. Numerical methods for convection-dominated diffusion problems based on combining the method of characteristics with finite element or finite difference procedures. *SIAM Journal on Numerical Analysis*, 19(5):871–885, October 1982. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Descloux:1983:NIP

[DR83] Jean Descloux and Jacques Rappaz. A nonlinear inverse power method with shift. *SIAM Journal on Numerical Analysis*, 20(6):1147–1152, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Doedel:1984:FDM

[DR84] E. J. Doedel and G. W. Reddien. Finite difference methods for singular two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 21(2): 300–313, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dai:1990:CMF

[DR90] Rui-Xiu Dai and Werner C. Rheinboldt. On the computation of manifolds of foldpoints for parameter-dependent problems. *SIAM Journal on Numerical Analysis*, 27(2):437–446, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Draghicescu:1994:EIP

[Dra94] C. I. Draghicescu. An efficient implementation of particle methods for the incompressible Euler equations. *SIAM Journal on Numerical Analysis*, 31(4):1090–1108, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Driscoll:1999:NDD

[Dri99] Tobin A. Driscoll. A nonoverlapping domain decomposition method for Symm's equation for conformal mapping. *SIAM Journal on Numerical Analysis*, 36(3): 922–934, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32416`.

Drmac:1998:ACP

[Drm98a] Zlatko Drmac. Accurate computation of the product-induced singular value decomposition with applications. *SIAM Journal on Numerical Analysis*, 35(5): 1969–1994, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29263`.

Drmac:1998:TAC

[Drm98b] Zlatko Drmac. A tangent algorithm for computing the generalized singular value decomposition. *SIAM Journal on Numerical Analysis*, 35 (5):1804–1832, October 1998.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28988.

Didenko:1995:AMS

[DRS95] V. D. Didenko, S. Roch, and B. Silbermann. Approximation methods for singular integral equations with conjugation on curves with corners. *SIAM Journal on Numerical Analysis*, 32(6):1910–1939, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dieci:1994:UIA

[DRV94] Luca Dieci, Robert D. Russell, and Erik S. Van Vleck. Unitary integrators and applications to continuous orthonormalization techniques. *SIAM Journal on Numerical Analysis*, 31(1):261–281, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dieci:1997:CLE

[DRV97] Luca Dieci, Robert D. Russell, and Erik S. Van Vleck. On the computation of Lyapunov exponents for continuous dynamical systems. *SIAM Journal on Numerical Analysis*, 34(1):402–423, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/24731.

Dawson:1989:SIE

[DRW89] C. N. Dawson, T. F. Russell, and M. F. Wheeler. Some improved error estimates for the modified method of characteristics. *SIAM Journal on Numerical Analysis*, 26(6):1487–1512, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dryja:1978:ADG

[Dry78] M. Dryja. Alternating direction Galerkin methods for the systems of hyperbolic equations of first order. *SIAM Journal on Numerical Analysis*, 15(1):81–89, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dryja:1983:FEC

[Dry83] M. Dryja. A finite element - capacitance matrix method for the elliptic problem. *SIAM Journal on Numerical Analysis*, 20(4):671–680, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duris:1968:CSL

[DS68] C. S. Duris and V. P. Sreedharan. Chebyshev and l^1-solutions of linear equations using least squares solutions. *SIAM Journal on Numerical Analysis, 5(3):491–505, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dennis:1972:SMP

[DS72] J. E. Dennis, Jr. and Roland A. Sweet. Some minimum properties of the trapezoidal rule. *SIAM Journal on Numerical Analysis*, 9(2): 230–236, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deBoor:1973:CGP

[dS73] Carl de Boor and Blair Swartz. Collocation at Gaussian points. *SIAM Journal on Numerical Analysis*, 10 (4):582–606, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dougalis:1980:SGA

[DS80] Vassilios A. Dougalis and Steven M. Serbin. On the superconvergence of Galerkin approximations to second-order hyperbolic equations. *SIAM Journal on Numerical Analysis*, 17(3):431–446, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

DeVore:1984:EBG

[DS84] Ronald A. DeVore and L. Ridgway Scott. Error bounds for Gaussian quadrature and weighted-L^1 polynomial approximation. *SIAM Journal on Numerical Analysis*, 21(2):400–412, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dennis:1986:SPA

[DS86] J. E. Dennis, Jr. and Trond Steihaug. On the successive projections approach to least-squares problems. *SIAM Journal on Numerical Analysis*, 23(4):717–733, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Douglas:1989:USA

[DS89a] Craig C. Douglas and Barry F. Smith. Using symmetries and antisymmetries to analyze a parallel multigrid algorithm: the elliptic boundary value problem case. *SIAM Journal on Numerical Analysis*, 26(6): 1439–1461, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dubeau:1989:DAF

[DS89b] François Dubeau and Jean Savoie. Développements asymptotiques de fonctions splines avec partage uniforme de la droite Réelle. (French) [asymptotic expansions of spline functions with uniform partition of the real line]. *SIAM Journal on*

Numerical Analysis, 26(2): 468–479, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Disney:1992:LIR

[DS92] Shaun Disney and Ian H. Sloan. Lattice integration rules of maximal rank formed by copying rank 1 rules. *SIAM Journal on Numerical Analysis*, 29(2): 566–577, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dubeau:1997:BEE

[DS97] François Dubeau and Jean Savoie. Best error estimates for odd and even degree deficient splines. *SIAM Journal on Numerical Analysis*, 34(3):1167–1184, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25928`.

Dryja:1994:SAI

[DSW94] Maksymilian Dryja, Barry F. Smith, and Olof B. Widlund. Schwarz analysis of iterative substructuring algorithms for elliptic problems in three dimensions. *SIAM Journal on Numerical Analysis*, 31(6):1662–1694, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duris:1973:FSA

[DT73] C. S. Duris and M. G. Temple. A finite step algorithm for determining the “Strict” Chebyshev solution to $Ax = b$. *SIAM Journal on Numerical Analysis*, 10(4):690–699, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deAngelis:1993:IPP

[dT93] P. L. de Angelis and G. Toraldo. On the identification property of a projected gradient method. *SIAM Journal on Numerical Analysis*, 30 (5):1483–1497, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dennis:1976:ATM

[DTW76] J. E. Dennis, Jr., J. F. Traub, and R. P. Weber. The algebraic theory of matrix polynomials. *SIAM Journal on Numerical Analysis*, 13(6):831–845, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dennis:1978:ASM

[DTW78] J. E. Dennis, Jr., J. F. Traub, and R. P. Weber. Algorithms for solvents of matrix polynomials. *SIAM Journal on Numerical Analysis*, 15(3): 523–533, June 1978. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Dubois:1990:DVP

[Dub90] François Dubois. Discrete vector potential representation of a divergence-free vector field in three-dimensional domains: Numerical analysis of a model problem. *SIAM Journal on Numerical Analysis*, 27(5):1103–1141, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duffy:1982:QPC

[Duf82] Michael G. Duffy. Quadrature over a pyramid or cube of integrands with a singularity at a vertex. *SIAM Journal on Numerical Analysis*, 19(6):1260–1262, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dunham:1971:CAL

[Dun71] Charles B. Dunham. Chebyshev approximation with the local Haar condition. *SIAM Journal on Numerical Analysis*, 8(4):749–753, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dunaway:1974:CZR

[Dun74a] Donna K. Dunaway. Calculation of zeros of a real polynomial through factorization using Euclid's algorithm. *SIAM Journal on Numerical Analysis*, 11(6):1087–1104, December 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dunham:1974:CSE

[Dun74b] Charles B. Dunham. Convergence of Stiefel's exchange method on an infinite set. *SIAM Journal on Numerical Analysis*, 11(4):729–731, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dunham:1975:NMS

[Dun75] C. B. Dunham. Nonlinear mean-square approximation on finite sets. *SIAM Journal on Numerical Analysis*, 12(1):105–110, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dunham:1980:BOS

[Dun80a] Charles B. Dunham. Behavior of the one-sided alternating Chebyshev operator. *SIAM Journal on Numerical Analysis*, 17(3):428–430, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dunham:1980:RCD

[Dun80b] Charles B. Dunham. The rate of convergence of discretization in Chebyshev approximation on rectangular sets. *SIAM Journal on Numerical Analysis*, 17(5):635–638, October 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dunham:1980:SDC

[Dun80c] Charles B. Dunham. Stability of differential correction for rational Chebyshev approximation. *SIAM Journal on Numerical Analysis*, 17(5): 639–640, October 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duncan:1997:SFD

[Dun97] D. B. Duncan. Symplectic finite difference approximations of the nonlinear Klein–Gordon equation. *SIAM Journal on Numerical Analysis*, 34(5): 1742–1760, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24310`.

Dupont:1968:FPS

[Dup68] Todd Dupont. A factorization procedure for the solution of elliptic difference equations. *SIAM Journal on Numerical Analysis*, 5(4):753–782, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dupont:1973:EGM

[Dup73a] Todd Dupont. L^2-estimates for Galerkin methods for second order hyperbolic equations. *SIAM Journal on Numerical Analysis*, 10(5):880–889, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dupont:1973:GMF

[Dup73b] Todd Dupont. Galerkin methods for first order hyperbolics: An example. *SIAM Journal on Numerical Analysis*, 10(5): 890–899, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dupont:1976:UTS

[Dup76] Todd Dupont. A unified theory of superconvergence for Galerkin methods for two-point boundary problems. *SIAM Journal on Numerical Analysis*, 13(3):362–368, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duris:1977:DIS

[Dur77] C. S. Duris. Discrete interpolating and smoothing spline functions. *SIAM Journal on Numerical Analysis*, 14 (4):686–698, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duran:1983:PAS

[Dur83] Ricardo G. Durán. On polynomial approximation in Sobolev spaces. *SIAM Journal on Numerical Analysis*, 20(5):985–988, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duran:1988:NCL

[Dur88a] Ricardo G. Durán. A note on the convergence of linear finite elements. *SIAM Journal on Numerical Analysis*, 25 (5):1032–1036, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duran:1988:AMD

[Dur88b] Ricardo G. Durán. On the approximation of miscible displacement in porous media by a method of characteristics combined with a mixed method. *SIAM Journal on Numerical Analysis*, 25(5): 989–1001, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dussault:1995:NSE

[Dus95] Jean-Pierre Dussault. Numerical stability and efficiency of penalty algorithms. *SIAM Journal on Numerical Analysis*, 32(1):296–317, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dutt:1988:SBC

[Dut88] Pravir Dutt. Stable boundary conditions and difference schemes for Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 25(2): 245–267, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dutt:1990:SMI

[Dut90] P. Dutt. Spectral methods for initial boundary value problems — an alternative approach. *SIAM Journal on Numerical Analysis*, 27(4):885–903, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dobson:1997:CIM

[DV97] David C. Dobson and Curtis R. Vogel. Convergence of an iterative method for total variation denoising. *SIAM Journal on Numerical Analysis*, 34(5): 1779–1791, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28701`.

Dawson:1994:CGM

[DVW94] C. N. Dawson, C. J. Van Duijn, and M. F. Wheeler. Characteristic-galerkin methods for contaminant transport with nonequilibrium adsorption kinetics. *SIAM Journal* on *Numerical Analysis*, 31(4): 982–999, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hoog:1974:HOM

[DW74] Frank De Hoog and Richard Weiss. High order methods for a class of Volterra integral equations with weakly singular kernels. *SIAM Journal on Numerical Analysis*, 11(6): 1166–1180, December 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

DeHoog:1976:DMB

[DW76a] Frank R. De Hoog and Richard Weiss. Difference methods for boundary value problems with a singularity of the first kind. *SIAM Journal on Numerical Analysis*, 13(5): 775–813, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dunn:1976:SCG

[DW76b] Roderick J. Dunn, Jr. and Mary Fanett Wheeler. Some collocation-Galerkin methods for two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 13(5): 720–733, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hoog:1978:CMS

[DW78] Frank R. De Hoog and Richard Weiss. Collocation methods for singular boundary value problems. *SIAM Journal on Numerical Analysis*, 15(1):198–217, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

deHoog:1979:NSB

[dW79] Frank R. de Hoog and Richard Weiss. The numerical solution of boundary value problems with an essential singularity. *SIAM Journal on Numerical Analysis*, 16(4): 637–669, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dennis:1981:CTL

[DW81] J. E. Dennis, Jr. and Homer F. Walker. Convergence theorems for least-change secant update methods. *SIAM Journal on Numerical Analysis*, 18(6):949–987, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See erratum [DW82].

Dennis:1982:ECT

[DW82] J. E. Dennis, Jr. and Homer F. Walker. Erratum: “Convergence Theorems for Least-Change Secant Update Methods” [SIAM J. Numer. Anal. **18** (1981), no.

6, 949–987]. *SIAM Journal on Numerical Analysis*, 19(2):443, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [DW81].

Dennis:1985:LCS

[DW85] J. E. Dennis, Jr. and Homer F. Walker. Least-change sparse secant update methods with inaccurate secant conditions. *SIAM Journal on Numerical Analysis*, 22(4):760–778, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dennis:1993:SLC

[DW93] John E. Dennis, Jr. and H. Wolkowicz. Sizing and least-change secant methods. *SIAM Journal on Numerical Analysis*, 30(5):1291–1314, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Du:1999:NST

[DW99] Qiang Du and Xiaonan Wu. Numerical solution of the three-dimensional Ginzburg–Landau models using artificial boundary. *SIAM Journal on Numerical Analysis*, 36 (5):1482–1506, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33031`.

Dawson:1998:TGF

[DWW98] Clint N. Dawson, Mary F. Wheeler, and Carol S. Woodward. A two-grid finite difference scheme for nonlinear parabolic equations. *SIAM Journal on Numerical Analysis*, 35(2):435–452, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29349`.

Dyksen:1987:TPG

[Dyk87] Wayne R. Dyksen. Tensor product generalized ADI methods for separable elliptic problems. *SIAM Journal on Numerical Analysis*, 24(1): 59–76, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dziuk:1999:DAC

[Dzi99] Gerhard Dziuk. Discrete anisotropic curve shortening flow. *SIAM Journal on Numerical Analysis*, 36(6): 1808–1830, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33753`.

E:1992:CSM

[E92] Weinan E. Convergence of spectral methods for Burgers' equation. *SIAM Journal* *on Numerical Analysis*, 29(6): 1520–1541, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

El-Alem:1991:GCT

[EA91] Mahmoud El-Alem. A global convergence theory for the Celis–Dennis–Tapia trust-region algorithm for constrained optimization. *SIAM Journal on Numerical Analysis*, 28(1):266–290, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

El-Attar:1979:ANM

[EAVD79] R. A. El-Attar, M. Vidyasagar, and S. R. K. Dutta. An algorithm for L_1-norm minimization with application to nonlinear L_1-approximation. *SIAM Journal on Numerical Analysis*, 16(1):70–86, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ebmeyer:1998:EEC

[Ebm98] Carsten Ebmeyer. Error estimates for a class of degenerate parabolic equations. *SIAM Journal on Numerical Analysis*, 35(3):1095–1112, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30520`.

Elman:1993:OER

[EC93] Howard C. Elman and Michael P. Chernesky. Ordering effects on relaxation methods applied to the discrete one-dimensional convection-diffusion equation. *SIAM Journal on Numerical Analysis*, 30(5):1268–1290, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Elliott:1977:QRO

[ED77] David Elliott and J. D. Donaldson. On quadrature rules for ordinary and Cauchy principal value integrals over contours. *SIAM Journal on Numerical Analysis*, 14(6):1078–1087, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Evans:1982:NGH

[ED82] D. J. Evans and A. Danaee. A new group hopscotch method for the numerical solution of partial differential equations. *SIAM Journal on Numerical Analysis*, 19(3):588–598, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eisenstat:1983:VIM

[EES83] Stanley C. Eisenstat, Howard C. Elman, and Martin H. Schultz. Variational iterative methods for nonsymmetric systems of linear equations. *SIAM Journal on*

Numerical Analysis, 20(2): 345–357, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Elliott:1989:NFE

[EF89] Charles M. Elliott and Donald A. French. A nonconforming finite-element method for the two-dimensional Cahn–Hilliard equation. *SIAM Journal on Numerical Analysis*, 26(4):884–903, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ehrlich:1975:SDS

[EG75] Louis W. Ehrlich and Murli M. Gupta. Some difference schemes for the biharmonic equation. *SIAM Journal on Numerical Analysis*, 12(5): 773–790, October 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Elman:1994:IPU

[EG94] Howard C. Elman and Gene H. Golub. Inexact and preconditioned Uzawa algorithms for saddle point problems. *SIAM Journal on Numerical Analysis*, 31(6):1645–1661, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eggermont:1983:CVI

[Egg83] P. P. B. Eggermont. Collocation for Volterra integral equations of the first kind with iterated kernel. *SIAM Journal on Numerical Analysis*, 20(5):1032–1048, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eggermont:1988:GMA

[Egg88] Paul P. B. Eggermont. On Galerkin methods for Abel-type integral equations. *SIAM Journal on Numerical Analysis*, 25(5):1093–1117, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Erisman:1985:SSM

[EGLP85] A. M. Erisman, R. G. Grimes, J. G. Lewis, and W. G. Poole, Jr. A structurally stable modification of Hellerman–Rarick's P^4 algorithm for reordering unsymmetric sparse matrices. *SIAM Journal on Numerical Analysis*, 22(2): 369–385, April 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Epstein:1972:NQF

[EH72] M. P. Epstein and R. W. Hamming. Noninterpolatory quadrature formulas. *SIAM Journal on Numerical Analysis*, 9(3):464–475, September 1972. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Eberlein:1975:GCA

[EH75] P. J. Eberlein and C. P. Huang. Global convergence of the QR algorithm for unitary matrices with some results for normal matrices. *SIAM Journal on Numerical Analysis*, 12 (1):97–104, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Enright:1976:TRI

[EH76] W. H. Enright and T. E. Hull. Test results on initial value methods for non-stiff ordinary differential equations. *SIAM Journal on Numerical Analysis*, 13(6):944–961, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Engquist:1989:PMA

[EH89] Björn Engquist and Thomas Y. Hou. Particle method approximation of oscillatory solutions to hyperbolic differential equations. *SIAM Journal on Numerical Analysis*, 26 (2):289–319, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eisen:1992:NMS

[EH92] Henner Eisen and Wilhelm Heinrichs. A new method of stabilization for singular perturbation problems with spectral methods. *SIAM Journal on Numerical Analysis*, 29(1): 107–122, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Enright:1998:CAS

[EH98] W. H. Enright and H. Hayashi. Convergence analysis of the solution of retarded and neutral delay differential equations by continuous numerical methods. *SIAM Journal on Numerical Analysis*, 35(2):572–585, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30204`.

Ellison:1987:USC

[EHP87] J. H. Ellison, C. A. Hall, and T. A. Porsching. An unconditionally stable convergent finite difference method for Navier–Stokes problems on curved domains. *SIAM Journal on Numerical Analysis*, 24(6):1233–1248, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ehrlich:1971:SBE

[Ehr71] Louis W. Ehrlich. Solving the biharmonic equation as coupled finite difference equations. *SIAM Journal on Numerical Analysis*, 8(2): 278–287, June 1971. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Ehrich:1998:PIG

[Ehr98] Sven Ehrich. On product integration with Gauss–Kronrod nodes. *SIAM Journal on Numerical Analysis*, 35(1):78–92, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29579`.

Eisenstat:1995:RPT

[EI95] Stanley C. Eisenstat and Ilse C. F. Ipsen. Relative perturbation techniques for singular value problems. *SIAM Journal on Numerical Analysis*, 32(6):1972–1988, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eich:1993:CRC

[Eic93] Edda Eich. Convergence results for a coordinate projection method applied to mechanical systems with algebraic constraints. *SIAM Journal on Numerical Analysis*, 30(5):1467–1482, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Einfeldt:1988:GTM

[Ein88] Bernd Einfeldt. On Godunov-type methods for gas dynamics. *SIAM Journal on Numerical Analysis*, 25(2):294–318, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eisen:1966:SCF

[Eis66] Dennis Eisen. Stability and convergence of finite difference schemes with singular coefficients. *SIAM Journal on Numerical Analysis*, 3(4):545–552, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eisen:1967:CCF

[Eis67a] Dennis Eisen. On the construction of consistent finite difference schemes with certain invariant subspaces. *SIAM Journal on Numerical Analysis*, 4(3):349–356, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eisen:1967:NAF

[Eis67b] Dennis Eisen. On the numerical analysis of a fourth order wave equation. *SIAM Journal on Numerical Analysis*, 4(3):457–464, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eisenstat:1974:RCB

[Eis74] Stanley C. Eisenstat. On the rate of convergence of the bergman-vekua method for the numerical solution of elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 11(3): 654–680, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eisenstat:1983:NGC

[Eis83] Stanley C. Eisenstat. A note on the generalized conjugate gradient method. *SIAM Journal on Numerical Analysis*, 20 (2):358–361, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eriksson:1987:EEA

[EJ87] Kenneth Eriksson and Claes Johnson. Error estimates and automatic time step control for nonlinear parabolic problems. I. *SIAM Journal on Numerical Analysis*, 24(1): 12–23, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eriksson:1991:AFE

[EJ91] Kenneth Eriksson and Claes Johnson. Adaptive finite element methods for parabolic problems. I: A linear model problem. *SIAM Journal on Numerical Analysis*, 28(1): 43–77, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eriksson:1995:AFEa

[EJ95a] Kenneth Eriksson and Claes Johnson. Adaptive finite element methods for parabolic problems. II. optimal error estimates in $L_\infty L_2$ and $L_\infty L_\infty$. *SIAM Journal on Numerical Analysis*, 32(3):706–740, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eriksson:1995:AFEb

[EJ95b] Kenneth Eriksson and Claes Johnson. Adaptive finite element methods for parabolic problems. IV. nonlinear problems. *SIAM Journal on Numerical Analysis*, 32(6):1729–1749, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eriksson:1995:AFEc

[EJ95c] Kenneth Eriksson and Claes Johnson. Adaptive finite element methods for parabolic problems V: Long-time integration. *SIAM Journal on Numerical Analysis*, 32(6): 1750–1763, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eisenstat:1985:OMP

[EJL85] S. C. Eisenstat, K. R. Jackson, and J. W. Lewis. The order of monotone piecewise cubic interpolation. *SIAM Journal on Numerical Analy-*

sis, 22(6):1220–1237, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eriksson:1998:AFE

[EJL98] Kenneth Eriksson, Claes Johnson, and Stig Larsson. Adaptive finite element methods for parabolic problems VI: Analytic semigroups. *SIAM Journal on Numerical Analysis*, 35(4): 1315–1325, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31021`.

Efraimsson:1999:RNE

[EK99] Gunilla Efraimsson and Gunilla Kreiss. A remark on numerical errors downstream of slightly viscous shocks. *SIAM Journal on Numerical Analysis*, 36(3):853–863, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31328`.

ElBaz:1990:FPA

[El 90] Didier El Baz. M-functions and parallel asynchronous algorithms. *SIAM Journal on Numerical Analysis*, 27(1): 136–140, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Estes:1972:SGP

[EL72] R. H. Estes and E. R. Lancaster. Some generalized power series inversions. *SIAM Journal on Numerical Analysis*, 9(2):241–247, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Elliott:1973:EL

[EL73] David Elliott and Binh Lam. An estimate of $E_n(f)$ for large n. *SIAM Journal on Numerical Analysis*, 10(6):1091–1102, December 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ervin:1989:ADC

[EL89] V. Ervin and W. Layton. An analysis of a defect-correction method for a model convection-diffusion equation. *SIAM Journal on Numerical Analysis*, 26(1):169–179, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Engl:1993:CRM

[EL93] Heinz W. Engl and Gerhard Landl. Convergence rates for maximum entropy regularization. *SIAM Journal on Numerical Analysis*, 30(5):1509–1536, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

E:1996:PMI

[EL96] Weinan E and Jian-Guo Liu. Projection method. II. Godunov–Ryabenki analysis. *SIAM Journal on Numerical Analysis*, 33(4): 1597–1621, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26450`.

Engquist:1997:CMM

[EL97] Bjorn Engquist and Erding Luo. Convergence of a multigrid method for elliptic equations with highly oscillatory coefficients. *SIAM Journal on Numerical Analysis*, 34(6): 2254–2273, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28940`.

Elden:1980:PTL

[Eld80] Lars Eldén. Perturbation theory for the least squares problem with linear equality constraints. *SIAM Journal on Numerical Analysis*, 17(3): 338–350, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Elliott:1982:CCM

[Ell82] David Elliott. The classical collocation method for singular integral equations. *SIAM Journal on Numerical Analysis*, 19(4):816–832, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ellacott:1983:FTE

[Ell83] S. W. Ellacott. On the Faber transform and efficient numerical rational approximation. *SIAM Journal on Numerical Analysis*, 20(5):989–1000, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Elliott:1984:RCM

[Ell84] David Elliott. Rates of convergence for the method of classical collocation for solving singular integral equations. *SIAM Journal on Numerical Analysis*, 21(1):136–148, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ewing:1993:DDT

[ELPV93] Richard E. Ewing, Raytcho D. Lazarov, Joseph E. Pasciak, and Panayot S. Vassilevski. Domain decomposition type iterative techniques for parabolic problems on locally refined grids. *SIAM Journal on Numerical Analysis*, 30(6):1537–1557, December 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Elton:1995:CCD

[ELR95] Bracy H. Elton, C. David Levermore, and Garry H. Rodrigue. Convergence of convective-diffusive lattice Boltzmann methods. *SIAM Journal on Numerical Analysis*, 32(5):1327–1354, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eiermann:1989:HSI

[ELV89] M. Eiermann, X. Li, and R. S. Varga. On hybrid semi-iterative methods. *SIAM Journal on Numerical Analysis*, 26(1):152–168, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ewing:1994:FDS

[ELV94] Richard E. Ewing, Raytcho D. Lazarov, and Apostol T. Vassilev. Finite difference scheme for parabolic problems on composite grids with refinement in time and space. *SIAM Journal on Numerical Analysis*, 31(6):1605–1622, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ewing:1991:SVA

[ELW91] R. E. Ewing, R. D. Lazarov, and J. Wang. Superconvergence of the velocity along the Gauss lines in mixed finite element methods. *SIAM Journal on Numerical Analysis*, 28(4):1015–1029, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ewing:1999:SMF

[ELW99] Richard E. Ewing, Michael M. Liu, and Junping Wang. Superconvergence of mixed finite element approximations over quadrilaterals. *SIAM Journal on Numerical Analysis*, 36(3):772–787, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32280`.

England:1988:BVP

[EM88] R. England and R. M. M. Mattheij. Boundary value problems and dichotomic stability. *SIAM Journal on Numerical Analysis*, 25(5):1037–1054, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Espinosa-Maldonado:1971:CQF

[EMB71] Ruben J. Espinosa-Maldonado and George D. Byrne. On the convergence of quadrature formulas. *SIAM Journal on Numerical Analysis*, 8(1):110–114, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eiermann:1983:CSM

[EN83] Michael Eiermann and Wilhelm Niethammer. On the construction of semiterative methods. *SIAM Journal on Numerical Analysis*, 20(6): 1153–1160, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Enright:1974:SDM

[Enr74] W. H. Enright. Second derivative multistep methods for stiff ordinary differential equations. *SIAM Journal on Numerical Analysis*, 11(2): 321–331, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Enright:1989:AEC

[Enr89] W. H. Enright. Analysis of error control strategies for continuous Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 26 (3):588–599, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Enright:1993:REA

[Enr93] W. H. Enright. The relative efficiency of alternative defect control schemes for high-order continuous Runge–Kutta formulas. *SIAM Journal on Numerical Analysis*, 30(5):1419–1445, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Epperson:1982:EEC

[Epp82] James F. Epperson. An error estimate for changing the Stefan problem. *SIAM Journal on Numerical Analysis*, 19(1): 114–120, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Epperson:1984:FEM

[Epp84] James F. Epperson. Finite element methods for a class of nonlinear evolution equations. *SIAM Journal on Numerical Analysis*, 21(6):1066–1079, December 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Epstein:1976:IPP

[Eps76] M. P. Epstein. On the influence of parametrization in parametric interpolation. *SIAM Journal on Numerical Analysis*, 13(2): 261–268, April 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ewing:1982:ETS

[ER82] Richard E. Ewing and Thomas F. Russell. Efficient time-stepping methods for miscible displacement problems in porous media. *SIAM Journal on Numerical Analysis*, 19

(1):1–67, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Erdelyi:1965:ILS

[Erd65] Ivan Erdélyi. An iterative least-square algorithm suitable for computing partial eigensystems. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(3): 421–436, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Ericksen:1980:IPM

[Eri80] W. S. Ericksen. Inverse pairs of matrices with integer elements. *SIAM Journal on Numerical Analysis*, 17 (3):474–477, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eriksson:1986:SEE

[Eri86] Kenneth Eriksson. Some error estimates for the p-version of the finite element method. *SIAM Journal on Numerical Analysis*, 23(2): 403–411, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ehile:1976:DEC

[ES76] Gerd-Peter Ehile and Hubert Schwetlick. Discretized Euler–Chebyshev multistep methods. *SIAM Journal on Numerical Analysis*, 13(3): 432–447, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Elman:1986:PFD

[ES86] Howard C. Elman and Martin H. Schultz. Preconditioning by fast direct methods for nonselfadjoint nonseparable elliptic equations. *SIAM Journal on Numerical Analysis*, 23(1):44–57, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Elliott:1993:GDD

[ES93] C. M. Elliott and A. M. Stuart. The global dynamics of discrete semilinear parabolic equations. *SIAM Journal on Numerical Analysis*, 30(6): 1622–1663, December 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Engquist:1998:CRF

[ES98] Bjorn Engquist and Björn Sjögreen. The convergence rate of finite difference schemes in the presence of shocks. *SIAM Journal on Numerical Analysis*, 35(6): 2464–2485, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31758`.

Espelid:1987:CGF

[Esp87] Terje O. Espelid. On the construction of good fully symmetric integration rules. *SIAM Journal on Numerical Analysis*, 24(4): 855–881, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Espinoza:1994:POS

[Esp94] Pedro C. Espinoza. Positive ordered solutions of a discrete analogue of a nonlinear elliptic eigenvalue problem. *SIAM Journal on Numerical Analysis*, 31(3):760–767, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Estep:1995:PEB

[Est95] Donald Estep. *A Posteriori* error bounds and global error control for approximation of ordinary differential equations. *SIAM Journal on Numerical Analysis*, 32(1): 1–48, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

El-Tom:1971:ISA

[ET71] M. E. A. El-Tom. On ignoring the singularity in approximate integration. *SIAM Journal on Numerical Analysis*, 8 (2):412–424, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Estivalezes:1996:HOP

[EV96] J. L. Estivalezes and P. Villedieu. High-order positivity-preserving kinetic schemes for the compressible Euler equations. *SIAM Journal on Numerical Analysis*, 33(5):2050–2067, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27100.

Evans:1980:SCT

[Eva80] D. J. Evans. On the solution of certain Toeplitz tridiagonal linear systems. *SIAM Journal on Numerical Analysis*, 17(5): 675–680, October 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Eisenberg:1972:OAU

[EW72] S. Eisenberg and B. Wood. On the order of approximation of unbounded functions by positive linear operators. *SIAM Journal on Numerical Analysis*, 9(2):266–276, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ellacott:1976:RCA

[EW76] S. Ellacott and Jack Williams. Rational Chebyshev approximation in the complex plane. *SIAM Journal on Numerical Analysis*, 13(3):310–323, June 1976. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Ewing:1980:GMM

[EW80] Richard E. Ewing and Mary Fanett Wheeler. Galerkin methods for miscible displacement problems in porous media. *SIAM Journal on Numerical Analysis*, 17(3):351–365, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ellner:1991:ADI

[EW91] Nancy S. Ellner and Eugene L. Wachspress. Alternating direction implicit iteration for systems with complex spectra. *SIAM Journal on Numerical Analysis*, 28 (3):859–870, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ewing:1996:OOE

[EW96] Richard E. Ewing and Hong Wang. An optimal-order estimate for Eulerian–Lagrangian localized adjoint methods for variable-coefficient advection-reaction problems. *SIAM Journal on Numerical Analysis*, 33(1):318–348, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ewing:1975:NSS

[Ewi75] Richard E. Ewing. Numerical solution of Sobolev partial differential equations. *SIAM Journal on Numerical Analysis*, 12(3):345–363, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ewing:1978:TSG

[Ewi78] Richard E. Ewing. Time-stepping Galerkin methods for nonlinear Sobolev partial differential equations. *SIAM Journal on Numerical Analysis*, 15(6):1125–1150, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ewing:1989:TAC

[EYL89] Richard E. Ewing, Yi Rang Yuan, and Gang Li. Timestepping along characteristics for a mixed finite-element approximation for compressible flow of contamination from nuclear waste in porous media. *SIAM Journal on Numerical Analysis*, 26(6):1513–1524, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

El-Zorkany:1983:EAD

[EZB83] H. I. El-Zorkany and R. Balasubramanian. An extension of the alternating direction Galerkin method to more general geometries. *SIAM Journal on Numerical Analysis*, 20 (2):258–278, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fairweather:1972:GMV

[Fai72] Graeme Fairweather. Galerkin methods for vibration problems in two space variables. *SIAM Journal on Numerical Analysis*, 9(4):702–714, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fairweather:1994:SCM

[Fai94] Graeme Fairweather. Spline collocation methods for a class of hyperbolic partial integro-differential equations. *SIAM Journal on Numerical Analysis*, 31(2): 444–460, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Falk:1978:ABE

[Fal78] Richard S. Falk. Approximation of the biharmonic equation by a mixed finite element method. *SIAM Journal on Numerical Analysis*, 15 (3):556–567, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Farrell:1966:AMS

[Far66] O. J. Farrell. On approximation measured by a surface integral. *SIAM Journal on Numerical Analysis*, 3 (2):236–247, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Farwig:1985:MTP

[Far85] R. Farwig. Multivariate truncated powers and B-splines with coalescent knots. *SIAM Journal on Numerical Analysis*, 22(3):592–603, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Farrell:1988:SCU

[Far88] Paul A. Farrell. Sufficient conditions for the uniform convergence of a difference scheme for a singularly perturbed turning point problem. *SIAM Journal on Numerical Analysis*, 25(3):618–643, June 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Favard:1964:CPS

[Fav64] J. Favard. On the comparison of the processes of summation. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??):38–52, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic).

Fazio:1996:NAN

[Faz96] Riccardo Fazio. A novel approach to the numerical solution of boundary value problems on infinite intervals. *SIAM Journal on Numerical Analysis*, 33(4): 1473–1483, August 1996. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/25204.

Fritsch:1980:MPC

[FC80] F. N. Fritsch and R. E. Carlson. Monotone piecewise cubic interpolation. *SIAM Journal on Numerical Analysis*, 17 (2):238–246, April 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Friedman:1991:NCC

[FD91] Mark J. Friedman and Eusebius J. Doedel. Numerical computation and continuation of invariant manifolds connecting fixed points. *SIAM Journal on Numerical Analysis*, 28(3):789–808, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fischer:1998:NSS

[FD98] Patrick Fischer and Mireille Defranceschi. Numerical solution of the Schrödinger equation in a wavelet basis for hydrogen-like atoms. *SIAM Journal on Numerical Analysis*, 35(1):1–12, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28455.

Feinberg:1982:SFA

[Fei82] Robert B. Feinberg. A_0-stable formulas of Adams type. *SIAM Journal on Numerical Analysis*, 19(2): 259–262, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ferguson:1973:SCP

[Fer73] David Ferguson. Sufficient conditions for Peano's kernel to be of one sign. *SIAM Journal on Numerical Analysis*, 10(6):1047–1054, December 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ferguson:1974:SCM

[Fer74] David R. Ferguson. Sign changes and minimal support properties of Hermite–Birkhoff splines with compact support. *SIAM Journal on Numerical Analysis*, 11 (4):769–779, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ferguson:1986:ASP

[Fer86a] Warren E. Ferguson, Jr. Analysis of a singularly-perturbed linear two-point boundary value problem. *SIAM Journal on Numerical Analysis*, 23(5): 940–947, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ferguson:1986:RCC

[Fer86b] Warren E. Ferguson, Jr. The rate of convergence of a class of block Jacobi schemes. *SIAM Journal on Numerical Analysis*, 23(2): 297–303, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Faddeev:1970:NNA

[FF70] D. K. Faddeev and V. N. Faddeeva. Natural norms in algebraic processes. *SIAM Journal on Numerical Analysis*, 7 (4):520–531, December 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fernandes:1991:ADG

[FF91] Ryan I. Fernandes and Graeme Fairweather. An alternating direction Galerkin method for a class of second-order hyperbolic equations in two space variables. *SIAM Journal on Numerical Analysis*, 28(5):1265–1281, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Farhloul:1993:NMF

[FF93] M. Farhloul and M. Fortin. A new mixed finite element for the Stokes and elasticity problems. *SIAM Journal on Numerical Analysis*, 30(4):971–990, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Falcone:1998:CAC

[FF98] Maurizio Falcone and Roberto Ferretti. Convergence analysis for a class of high-order semi-Lagrangian advection schemes. *SIAM Journal on Numerical Analysis*, 35(3):909–940, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27351`.

Feistauer:1999:EEC

[FFLMW99] Miloslav Feistauer, Jirí Felcman, Mária Lukácová-Medvid'ová, and Gerald Warnecke. Error estimates for a combined finite volume–finite element method for nonlinear convection–diffusion problems. *SIAM Journal on Numerical Analysis*, 36(5): 1528–1548, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31469`.

Fletcher:1974:LMA

[FGH74] R. Fletcher, J. A. Grant, and M. D. Hebden. Linear minimax approximation as the limit of best L_p-approximation. *SIAM Journal on Numerical Analysis*, 11(1):123–136, March 1974. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic).

Fix:1972:AIC

[FH72] G. Fix and R. Heiberger. An algorithm for the ill-conditioned generalized eigenvalue problem. *SIAM Journal on Numerical Analysis*, 9 (1):78–88, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Feistauer:1996:APE

[FHK96] Miloslav Feistauer, George C. Hsiao, and Ralph E. Kleinman. Asymptotic and A posteriori error estimates for boundary element solutions of hypersingular integral equations. *SIAM Journal on Numerical Analysis*, 33(2): 666–685, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fox:1967:ABE

[FHM67] L. Fox, P. Henrici, and C. Moler. Approximations and bounds for eigenvalues of elliptic operators. *SIAM Journal on Numerical Analysis*, 4(1):89–102, March 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Field:1978:EBE

[Fie78] David A. Field. Error bounds for elliptic convergence regions for continued fractions. *SIAM Journal on Numerical Analysis*, 15(3):444–449, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Finlayson:1971:CGM

[Fin71] Bruce A. Finlayson. Convergence of the Galerkin method for nonlinear problems involving chemical reaction. *SIAM Journal on Numerical Analysis*, 8(2):316–324, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fisk:1982:OPN

[Fis82] Robert S. Fisk. On an oscillation phenomenon in the numerical solution of the diffusion-convection equation. *SIAM Journal on Numerical Analysis*, 19(4):721–724, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fairgrieve:1991:KFM

[FJ91] Thomas F. Fairgrieve and Allan D. Jepson. O. K. Floquet multipliers. *SIAM Journal on Numerical Analysis*, 28 (5):1446–1462, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Falk:1976:PEM

[FK76] Richard S. Falk and J. Thomas King. A penalty and extrapolation method for the stationary Stokes equations. *SIAM Journal on Numerical Analysis*, 13(5):814–829, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fairweather:1984:GMS

[FKD84] Graeme Fairweather, Patrick Keast, and Julio César Díaz. On the H^{-1}-galerkin method for second-order linear two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 21(2): 314–326, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fix:1971:CSI

[FL71] George J. Fix and Kate Larsen. On the convergence of SOR iterations for finite element approximations to elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 8(3):536–547, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fresnel:1992:NSI

[FL92] Christophe Fresnel and Marie-Noëlle Le Roux. Numerical solution of an interdiffusion problem. *SIAM Journal on Numerical Analysis*, 29(1): 194–208, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fairweather:1967:NCP

[FM67] G. Fairweather and A. R. Mitchell. A new computational procedure for A.D.I. methods. *SIAM Journal on Numerical Analysis*, 4(2): 163–170, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Faber:1984:NSC

[FM84] Vance Faber and Thomas Manteuffel. Necessary and sufficient conditions for the existence of a conjugate gradient method. *SIAM Journal on Numerical Analysis*, 21 (2):352–362, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Faber:1987:OEM

[FM87] Vance Faber and Thomas A. Manteuffel. Orthogonal error methods. *SIAM Journal on Numerical Analysis*, 24(1): 170–187, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Falk:1990:EFE

[FM90a] Richard S. Falk and Mary E. Morley. Equivalence of finite element methods for problems in elasticity. *SIAM Journal on Numerical Analysis*, 27(6): 1486–1505, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Frommer:1990:ONL

[FM90b] Andreas Frommer and Günter Mayer. On the R-order of Newton-like methods for enclosing solutions of nonlinear equations. *SIAM Journal on Numerical Analysis*, 27(1): 105–116, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Friedlander:1999:GMR

[FMMR99] A. Friedlander, J. M. Martínez, B. Molina, and M. Raydan. Gradient method with retards and generalizations. *SIAM Journal on Numerical Analysis*, 36 (1):275–289, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27315`.

Farrell:1996:UCF

[FMOS96] Paul A. Farrell, John J. H. Miller, Eugene O'Riordan, and Grigori I. Shishkin. A uniformly convergent finite difference scheme for a singularly perturbed semilinear equation. *SIAM Journal on Numerical Analysis*, 33(3): 1135–1149, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fix:1980:AMF

[FN80] G. J. Fix and R. A. Nicolaides. An analysis of mixed finite element approximations for periodic acoustic wave propagation. *SIAM Journal on Numerical Analysis*, 17 (6):779–786, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Feldstein:1984:HOM

[FN84] Alan Feldstein and Kenneth W. Neves. High order methods for state-dependent delay differential equations with nonsmooth solutions. *SIAM Journal on Numerical Analysis*, 21(5):844–863, October 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Friedland:1987:FAN

[FNO87] S. Friedland, J. Nocedal, and M. L. Overton. The formulation and analysis of numerical methods for inverse eigenvalue problems. *SIAM Journal on Numerical Analysis*, 24 (3):634–667, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fontecilla:1988:LCS

[Fon88] Rodrigo Fontecilla. Local convergence of secant methods for nonlinear constrained optimization. *SIAM Journal on Numerical Analysis*, 25(3): 692–712, June 1988. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Fontecilla:1990:ISM

[Fon90] Rodrigo Fontecilla. Inexact secant methods for nonlinear constrained optimization. *SIAM Journal on Numerical Analysis*, 27(1):154–165, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ford:1965:MPI

[For65] Wayne T. Ford. Mathematical programming and integro-differential equations. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):171–202, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Ford:1966:MPI

[For66a] Wayne T. Ford. Mathematical programming and integro-differential equations: II. variable coefficients. *SIAM Journal on Numerical Analysis*, 3(3):383–389, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ford:1966:MPL

[For66b] Wayne T. Ford. Mathematical programming and linear operators in frechet spaces. *SIAM Journal on Numerical Analysis*, 3(3):367–371, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fornaro:1973:NEI

[For73] Robert J. Fornaro. Numerical evaluation of integrals around simple closed curves. *SIAM Journal on Numerical Analysis*, 10(4):623–634, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fornberg:1975:FMI

[For75] Bengt Fornberg. On a Fourier method for the integration of hyperbolic equations. *SIAM Journal on Numerical Analysis*, 12(4):509–528, September 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ford:1978:PDU

[For78] Wayne T. Ford. Polynomial deflation using regression analysis. *SIAM Journal on Numerical Analysis*, 15(2):219–223, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fortuna:1979:SCP

[For79] Zenon Fortuna. Some convergence properties of the conjugate gradient method in Hilbert space. *SIAM Journal on Numerical Analysis*, 16(3):380–384, June 1979. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Fornberg:1990:HOF

[For90] Bengt Fornberg. High-order finite differences and the pseudospectral method on staggered grids. *SIAM Journal on Numerical Analysis*, 27(4):904–918, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Foster:1981:GLM

[Fos81] Leslie V. Foster. Generalizations of Laguerre's method: higher order methods. *SIAM Journal on Numerical Analysis*, 18(6):1004–1018, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Finney:1986:MNQ

[FP86] Patricia Hillhouse Finney and Thomas E. Price, Jr. Minimum norm quadratures which satisfy nonstandard interpolating conditions. *SIAM Journal on Numerical Analysis*, 23 (1):210–216, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Forster:1991:EEG

[FP91] Klaus-Jürgen Förster and Knut Petras. Error estimates in Gaussian quadrature for functions of bounded variation. *SIAM Journal on Numerical Analysis*, 28(3): 880–889, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Freistuhler:1995:NSR

[FP95] Heinrich Freistühler and E. Bruce Pitman. A numerical study of a rotationally degenerate hyperbolic system. Part II. the Cauchy problem. *SIAM Journal on Numerical Analysis*, 32(3):741–753, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Funaro:1988:IPI

[FQZ88] Daniele Funaro, Alfio Quarteroni, and Paola Zanolli. An iterative procedure with interface relaxation for domain decomposition methods. *SIAM Journal on Numerical Analysis*, 25(6):1213–1236, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Franklin:1968:NAE

[FR68] Joel N. Franklin and Eugene R. Rodemich. Numerical analysis of an elliptic-parabolic partial differential equation. *SIAM Journal on Numerical Analysis*, 5 (4):680–716, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Frehse:1978:AEE

[FR78] Jens Frehse and Rolf Rannacher. Asymptotic L^∞-error estimates for linear finite element approximations of quasilinear boundary value problems. *SIAM Journal on Numerical Analysis*, 15(2): 418–431, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fink:1983:DEP

[FR83] James P. Fink and Werner C. Rheinboldt. On the discretization error of parametrized nonlinear equations. *SIAM Journal on Numerical Analysis*, 20(4):732–746, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fink:1985:LEE

[FR85a] James P. Fink and Werner C. Rheinboldt. Local error estimates for parametrized nonlinear equations. *SIAM Journal on Numerical Analysis*, 22(4):729–735, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fix:1985:CSF

[FR85b] George J. Fix and Milton E. Rose. A comparative study of finite element and finite difference methods for Cauchy–Riemann type equations. *SIAM Journal on Numerical Analysis*, 22(2): 250–261, April 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fink:1986:FSM

[FR86] James P. Fink and Werner C. Rheinboldt. Folds on the solution manifold of a parametrized equation. *SIAM Journal on Numerical Analysis*, 23(4):693–706, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Falk:1987:ACF

[FR87a] Richard S. Falk and Gerard R. Richter. Analysis of a continuous finite element method for hyperbolic equations. *SIAM Journal on Numerical Analysis*, 24(2): 257–278, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fink:1987:GFN

[FR87b] James P. Fink and Werner C. Rheinboldt. A geometric framework for the numerical study of singular points. *SIAM Journal on Numerical Analysis*, 24(3):618–633, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Falk:1992:LEE

[FR92] Richard S. Falk and Gerard R. Richter. Local error estimates for a finite element method for hyperbolic and convection-diffusion equations. *SIAM Journal on Numerical Analysis*, 29(3): 730–754, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Falk:1999:EFE

[FR99] Richard S. Falk and Gerard R. Richter. Explicit finite element methods for symmetric hyperbolic equations. *SIAM Journal on Numerical Analysis*, 36(3): 935–952, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32946`.

Franke:1971:OPA

[Fra71] Richard Franke. Orthogonal polynomials and approximate multiple integration. *SIAM Journal on Numerical Analysis*, 8(4):757–766, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Franke:1973:MPC

[Fra73] Richard Franke. Minimal point cubatures of precision seven for symmetric planar regions. *SIAM Journal on Numerical Analysis*, 10(5):849–862, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Franke:1978:COA

[Fra78] Richard Franke. On the computation of optimal approximations in Sard corner spaces. *SIAM Journal on Numerical Analysis*, 15(4):791–800, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Franklin:1987:CKA

[Fra87] Joel Franklin. Convergence in Karmarkar's algorithm for linear programming. *SIAM Journal on Numerical Analysis*, 24(4):928–945, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

French:1987:FEM

[Fre87] Donald A. French. The finite element method for a degenerate elliptic equation. *SIAM Journal on Numerical Analysis*, 24(4):788–815, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

French:1990:CFE

[Fre90] Donald A. French. On the convergence of finite-element approximations of a relaxed variational problem. *SIAM Journal on Numerical Analysis*, 27(2):419–436, April 1990. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Fredebeul:1998:BGB

[Fre98] Christoph Fredebeul. A-BDF: A generalization of the backward differentiation formulae. *SIAM Journal on Numerical Analysis*, 35(5): 1917–1938, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30621`.

Fritsch:1971:SCN

[Fri71] F. N. Fritsch. On self-contained numerical integration formulas for symmetric regions. *SIAM Journal on Numerical Analysis*, 8(2): 213–221, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Friedman:1981:MSN

[Fri81] Mark J. Friedman. Mathematical study of the nonlinear singular integral magnetic field equation. II. *SIAM Journal on Numerical Analysis*, 18(4):644–653, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Feldstein:1974:NMN

[FS74] Alan Feldstein and John R. Sopka. Numerical methods for nonlinear Volterra integro-differential equations. *SIAM Journal on Numerical Analysis*, 11(4):826–846, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ford:1987:AGR

[FS87] William F. Ford and Avram Sidi. An algorithm for a generalization of the Richardson extrapolation process. *SIAM Journal on Numerical Analysis*, 24(5):1212–1232, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Franca:1991:EAS

[FS91] Leopoldo P. Franca and Rolf Stenberg. Error analysis of some Galerkin least squares methods for the elasticity equations. *SIAM Journal on Numerical Analysis*, 28(6): 1680–1697, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fontecilla:1987:CTC

[FST87] Rodrigo Fontecilla, Trond Steihaug, and Richard A. Tapia. A convergence theory for a class of quasi-Newton methods for constrained optimization. *SIAM Journal on Numerical Analysis*, 24 (5):1133–1151, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Frank:1981:CC

[FSU81] Reinhard Frank, Josef Schneid, and Christoph W. Ueberhuber. The concept of B-convergence. *SIAM Journal on Numerical Analysis*, 18(5): 753–780, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Frank:1985:ORI

[FSU85a] Reinhard Frank, Josef Schneid, and Christoph W. Ueberhuber. Order results for implicit Runge–Kutta methods applied to stiff systems. *SIAM Journal on Numerical Analysis*, 22(3):515–534, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Frank:1985:SPI

[FSU85b] Reinhard Frank, Josef Schneid, and Christoph W. Ueberhuber. Stability properties of implicit Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 22(3): 497–514, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ford:1974:UEE

[FT74] William H. Ford and T. W. Ting. Uniform error estimates for difference approximations to nonlinear pseudo-parabolic partial differential equations. *SIAM Journal on Numerical Analysis*, 11(1): 155–169, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

FroeseFischer:1969:PST

[FU69] Charlotte Froese Fischer and Riaz A. Usmani. Properties of some tridiagonal matrices and their application to boundary value problems. *SIAM Journal on Numerical Analysis*, 6(1):127–142, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Funaro:1987:PMC

[Fun87] Daniele Funaro. A preconditioning matrix for the Chebyshev differencing operator. *SIAM Journal on Numerical Analysis*, 24(5):1024–1031, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Funaro:1990:VFC

[Fun90] Daniele Funaro. A variational formulation for the Chebyshev pseudospectral approximation of Neumann problems. *SIAM Journal on Numerical Analysis*, 27(3): 695–703, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Funaro:1993:NSA

[Fun93] Daniele Funaro. A new scheme for the approximation of advection-diffusion equations by collocation. *SIAM Journal on Numerical Analysis*, 30(6):1664–1676, December 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Falk:1995:CSO

[FX95] Richard S. Falk and Jian-Ming Xu. Convergence of a second-order scheme for the nonlinear dynamical equations of elastic rods. *SIAM Journal on Numerical Analysis*, 32(4):1185–1209, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gray:1967:NTR

[GA67] H. L. Gray and T. A. Atchison. Nonlinear transformations related to the evaluation of improper integrals. I. *SIAM Journal on Numerical Analysis*, 4(3):363–371, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gabutti:1985:AAC

[Gab85] Bruno Gabutti. An asymptotic approximation for a class of oscillatory infinite integrals. *SIAM Journal on Numerical Analysis*, 22(6):1191–1199, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gaier:1966:CGG

[Gai66] Dieter Gaier. On the coefficients and the growth of gap power series. *SIAM Journal on Numerical Analysis*, 3 (2):248–265, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gaines:1974:DEA

[Gai74] Robert Gaines. Difference equations associated with boundary value problems for second order nonlinear ordinary differential equations. *SIAM Journal on Numerical Analysis*, 11(2): 411–434, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gray:1971:HOT

[GAM71] H. L. Gray, T. A. Atchison, and G. V. McWilliams. Higher order G-transformations. *SIAM Journal on Numerical Analysis*, 8(2):365–381, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Garcia-Archilla:1998:PGM

[GANT98] Bosco García-Archilla, Julia Novo, and Edriss S. Titi. Postprocessing the Galerkin method: a novel approach to approximate inertial manifolds. *SIAM Jour-*

nal on Numerical Analysis, 35(3):941–972, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/29609.

Gary:1966:GLR

[Gar66] John Gary. A generalization of the Lax–Richtmyer theorem on finite difference schemes. *SIAM Journal on Numerical Analysis*, 3 (3):467–473, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gargantini:1971:NSS

[Gar71] Irene Gargantini. The numerical stability of the Schur–Cohn criterion. *SIAM Journal on Numerical Analysis*, 8 (1):24–29, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Garey:1975:SNS

[Gar75] L. Garey. Solving nonlinear second kind Volterra equations by modified increment methods. *SIAM Journal on Numerical Analysis*, 12(3): 501–508, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gargantini:1978:FAC

[Gar78] Irene Gargantini. Further applications of circular arithmetic: Schroeder-like algorithms with error bounds for finding zeros of polynomials. *SIAM Journal on Numerical Analysis*, 15(3):497–510, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gary:1981:MIA

[Gar81] John Gary. The multigrid iteration applied to the collocation method. *SIAM Journal on Numerical Analysis*, 18 (2):211–224, April 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gargantini:1983:ULQ

[Gar83] Irene Gargantini. The use of linear quadtrees in a numerical problem. *SIAM Journal on Numerical Analysis*, 20(6): 1161–1169, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gartland:1984:CPE

[Gar84] E. C. Gartland, Jr. Computable pointwise error bounds and the Ritz method in one dimension. *SIAM Journal on Numerical Analysis*, 21(1): 84–100, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gartland:1988:SSC

[Gar88] Eugene C. Gartland, Jr. Strong stability of compact discrete boundary value problems via exact discretizations. *SIAM Journal on Numerical Analysis*, 25(1):111–123, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gartland:1993:UCS

[Gar93] Eugene C. Gartland, Jr. On the uniform convergence of the scharfetter-gummel discretization in one dimension. *SIAM Journal on Numerical Analysis*, 30(3):749–758, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gatica:1988:NPE

[Gat88] Gabriel N. Gatica. A note on the a posteriori error analysis for the finite element method. *SIAM Journal on Numerical Analysis*, 25(1):41–45, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gautschi:1967:NQP

[Gau67] Walter Gautschi. Numerical quadrature in the presence of a singularity. *SIAM Journal on Numerical Analysis*, 4(3):357–362, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gautschi:1970:ECC

[Gau70] Walter Gautschi. Efficient computation of the complex error function. *SIAM Journal on Numerical Analysis*, 7(1): 187–198, March 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See erratum [Wei95].

Gay:1979:SCP

[Gay79] David M. Gay. Some convergence properties of Broyden's method. *SIAM Journal on Numerical Analysis*, 16(4): 623–630, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gay:1981:PBN

[Gay81] David M. Gay. Perturbation bounds for nonlinear equations. *SIAM Journal on Numerical Analysis*, 18(4):654–663, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gay:1982:SIL

[Gay82] David M. Gay. Solving interval linear equations. *SIAM Journal on Numerical Analysis*, 19(4):858–870, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gay:1983:CPB

[Gay83] David M. Gay. Computing perturbation bounds for nonlinear algebraic equations. *SIAM Journal on Numerical Analysis*, 20(3):638–651, June 1983. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Greenberg:1989:CAS

[GB89] L. Greenberg and I. Babuška. A continuous analogue of Sturm sequences in the context of Sturm–Liouville equations. *SIAM Journal on Numerical Analysis*, 26(4):920–945, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Garnett:1971:HIM

[GBIY71] James M. Garnett, III, Adi Ben-Israel, and Stephen S. Yau. A hyperpower iterative method for computing matrix products involving the generalized inverse. *SIAM Journal on Numerical Analysis*, 8(1):104–109, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Graham:1988:HOM

[GC88] I. G. Graham and G. A. Chandler. High-order methods for linear functionals of solutions of second kind integral equations. *SIAM Journal on Numerical Analysis*, 25(5):1118–1137, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Guo:1995:SMF

[GC95] Ben Yu Guo and Wei Ming Cao. A spectral method for the fluid flow with low Mach number on the spherical surface. *SIAM Journal on Numerical Analysis*, 32(6):1764–1777, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gomes:1996:CEW

[GC96] Sônia M. Gomes and Elsa Cortina. Convergence estimates for the wavelet Galerkin method. *SIAM Journal on Numerical Analysis*, 33(1):149–161, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Guo:1998:ASM

[GC98] Benqi Guo and Weiming Cao. An additive Schwarz method for the *h*-*b* version of the finite element method in three dimensions. *SIAM Journal on Numerical Analysis*, 35(2):632–654, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29943`.

Gimlin:1974:MEA

[GCB74] D. R. Gimlin, R. K. Cavin, III, and M. C. Budge, Jr. A multiple exchange algorithm for calculation of best restricted approximations. *SIAM Journal on Numerical Analysis*, 11(2):219–231, April 1974. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gear:1965:HMI

[Gea65] C. W. Gear. Hybrid methods for initial value problems in ordinary differential equations. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):69–86, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Gear:1978:SNM

[Gea78] C. William Gear. The stability of numerical methods for second order ordinary differential equations. *SIAM Journal on Numerical Analysis*, 15 (1):188–197, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gear:1990:DAE

[Gea90] C. W. Gear. Differential algebraic equations, indices, and integral algebraic equations. *SIAM Journal on Numerical Analysis*, 27(6):1527–1534, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Geddes:1978:NMP

[Ged78] K. O. Geddes. Near-minimax polynomial approximation in an elliptical region. *SIAM Journal on Numerical Analysis*, 15(6):1225–1233, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Geddes:1981:BSC

[Ged81] K. O. Geddes. Block structure in the Chebyshev–Padé table. *SIAM Journal on Numerical Analysis*, 18(5):844–861, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gekeler:1975:CFD

[Gek75] E. Gekeler. A-convergence of finite difference approximations of parabolic initial-boundary value problems. *SIAM Journal on Numerical Analysis*, 12(1):1–12, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gekeler:1976:LMM

[Gek76] E. Gekeler. Linear multistep methods and Galerkin procedures for initial boundary value problems. *SIAM Journal on Numerical Analysis*, 13(4):536–548, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Geltner:1981:GRQ

[Gel81] Peter B. Geltner. General Rayleigh quotient iteration. *SIAM Journal on Numerical Analysis*, 18(5):839–

843, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Genis:1984:FEM

[Gen84] Anatoly M. Genis. On finite element methods for the Euler–Poisson–Darboux equation. *SIAM Journal on Numerical Analysis*, 21(6): 1080–1106, December 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Genz:1986:FSI

[Gen86] Alan Genz. Fully symmetric interpolatory rules for multiple integrals. *SIAM Journal on Numerical Analysis*, 23(6): 1273–1283, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

George:1973:NDR

[Geo73] Alan George. Nested dissection of a regular finite element mesh. *SIAM Journal on Numerical Analysis*, 10(2): 345–363, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

George:1974:BES

[Geo74] Alan George. On block elimination for sparse linear systems. *SIAM Journal on Numerical Analysis*, 11(3): 585–603, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

George:1976:NRS

[Geo76] Alan George. A negative result on sparse matrix splitting and Gaussian elimination. *SIAM Journal on Numerical Analysis*, 13(6):846–853, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

George:1977:NEU

[Geo77] Alan George. Numerical experiments using dissection methods to solve n by n grid problems. *SIAM Journal on Numerical Analysis*, 14 (2):161–179, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

George:1980:AOW

[Geo80] Alan George. An automatic one-way dissection algorithm for irregular finite element problems. *SIAM Journal on Numerical Analysis*, 17 (6):740–751, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gerasoulis:1986:PPQ

[Ger86] Apostolos Gerasoulis. Piecewise-polynomial quadratures for Cauchy singular integrals. *SIAM Journal on Numerical Analysis*, 23(4):891–902, August 1986. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gerasoulis:1989:NIV

[Ger89] Apostolos Gerasoulis. Nyström's iterative variant methods for the solution of Cauchy singular integral equations. *SIAM Journal on Numerical Analysis*, 26(2):430–441, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gottlieb:1976:GDF

[GG76] David Gottlieb and Bertil Gustafsson. Generalized du fort-frankel methods for parabolic initial-boundary value problems. *SIAM Journal on Numerical Analysis*, 13(1):129–144, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Guerra:1986:SIM

[GG86] Jaime Guerra and Bertil Gustafsson. A semi-implicit method for hyperbolic problems with different timescales. *SIAM Journal on Numerical Analysis*, 23(4):734–749, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gigola:1990:RMS

[GG90] Cristina Gígola and Susana Gómez. A regularization method for solving the finite convex min-max problem. *SIAM Journal on Numerical Analysis*, 27(6):1621–1634, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Govaerts:1997:DFM

[GGK97] W. Govaerts, J. Guckenheimer, and A. Khibnik. Defining functions for multiple Hopf bifurcations. *SIAM Journal on Numerical Analysis*, 34(3):1269–1288, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27216`.

Giladi:1998:IOI

[GGK98] Eldar Giladi, Gene H. Golub, and Joseph B. Keller. Inner and outer iterations for the Chebyshev algorithm. *SIAM Journal on Numerical Analysis*, 35(1):300–319, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29374`.

Granas:1979:SMN

[GGL79] A. Granas, R. B. Guenther, and J. W. Lee. The shooting method for the numerical solution of a class of nonlinear boundary value problems. *SIAM Journal on Numerical Analysis*, 16(5):828–836, October 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gasull:1999:ANM

[GGM99] Armengol Gasull, Antoni Guillamon, and Víctor Mañosa. An analytic-numerical method for computation of the Liapunov and period constants derived from their algebraic structure. *SIAM Journal on Numerical Analysis*, 36 (4):1030–1043, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29747`.

Gottlieb:1996:SGM

[GGOS96] David Gottlieb, Bertil Gustafsson, Pelle Olsson, and Bo Strand. On the superconvergence of Galerkin methods for hyperbolic IBVP. *SIAM Journal on Numerical Analysis*, 33(5):1778–1796, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25768`.

Ganesh:1994:PTD

[GGS94] M. Ganesh, I. G. Graham, and J. Sivaloganathan. A pseudospectral three-dimensional boundary integral method applied to a nonlinear mode problem from finite elasticity. *SIAM Journal on Numerical Analysis*, 31(5):1378–1414, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ganesh:1998:NSB

[GGS98] M. Ganesh, I. G. Graham, and J. Sivaloganathan. A new spectral boundary integral collocation method for three-dimensional potential problems. *SIAM Journal on Numerical Analysis*, 35(2):778–805, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30123`.

Gottlieb:1982:NBT

[GGT82] David Gottlieb, Max Gunzburger, and Eli Turkel. On numerical boundary treatment of hyperbolic systems for finite difference and finite element methods. *SIAM Journal on Numerical Analysis*, 19(4):671–682, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

George:1977:MMS

[GH77] J. H. George and H. G. Harris. Mathematical modeling of in situ oil shale retorting. *SIAM Journal on Numerical Analysis*, 14(1):137–151, March

1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gustafson:1983:DFB

[GH83] Karl Gustafson and Robert Hartman. Divergence-free bases for finite element schemes in hydrodynamics. *SIAM Journal on Numerical Analysis*, 20(4):697–721, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gunzburger:1992:TIE

[GH92] Max D. Gunzburger and Steven L. Hou. Treating inhomogeneous essential boundary conditions in finite element methods and the calculation of boundary stresses. *SIAM Journal on Numerical Analysis*, 29(2):390–424, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gohberg:1994:FPC

[GHK94] I. Gohberg, M. Hanke, and I. Koltracht. Fast preconditioned conjugate gradient algorithms for Wiener–Hopf integral equations. *SIAM Journal on Numerical Analysis*, 31(2):429–443, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Guo:1996:VBE

[GHS96] Benqi Guo, Norbert Heuer, and Ernst P. Stephan. The h-p version of the boundary element method for transmission problems with piecewise analytic data. *SIAM Journal on Numerical Analysis*, 33(2):789–808, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ghosh:1997:AES

[GHS97] Nilotpal Ghosh, William W. Hager, and Purandar Sarmah. The application of eigenpair stability to block diagonalization. *SIAM Journal on Numerical Analysis*, 34(3):1255–1268, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26125`.

Gaitanos:1983:OAO

[GHY83] N. Gaïtanos, A. Hadjidimos, and A. Yeyios. Optimum accelerated overrelaxation (AOR) method for systems with positive definite coefficient matrix. *SIAM Journal on Numerical Analysis*, 20(4):774–783, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Girault:1974:TFD

[Gir74] V. Girault. Theory of a finite difference method on irregular networks. *SIAM Journal on Numerical Analysis*, 11 (2):260–282, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Girault:1978:MFE

[Gir78] V. Girault. A mixed finite element method for the stationary Stokes equations. *SIAM Journal on Numerical Analysis*, 15(3):534–555, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Girao:1995:CCA

[Gir95] Pedro Martins Girão. Convergence of a crystalline algorithm for the motion of a simple closed convex curve by weighted curvature. *SIAM Journal on Numerical Analysis*, 32(3):886–899, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Golse:1999:CNT

[GJL99] François Golse, Shi Jin, and C. David Levermore. The convergence of numerical transfer schemes in diffusive regimes I: Discrete-ordinate method. *SIAM Journal on Numerical Analysis*, 36 (5):1333–1369, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31598`.

Golub:1965:CSV

[GK65] G. H. Golub and W. Kahan. Calculating the singular values and pseudo-inverse of a matrix. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2):205–224, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Gustafsson:1983:DAH

[GK83] Bertil Gustafsson and Heinz-Otto Kreiss. Difference approximations of hyperbolic problems with different time scales. I. the reduced problem. *SIAM Journal on Numerical Analysis*, 20(1):46–58, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Garloff:1986:OIS

[GK86] J. Garloff and R. Krawczyk. Optimal inclusion of a solution set. *SIAM Journal on Numerical Analysis*, 23(1): 217–226, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ghaderpanah:1990:PS

[GK90] S. Ghaderpanah and S. Klasa. Polynomial scaling. *SIAM Journal on Numerical Analysis*, 27(1):117–135, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Goldman:1996:OOS

[GK96] Daniel Goldman and Tasso J. Kaper. N th-order operator splitting schemes and nonreversible systems. *SIAM Journal on Numerical Analysis*, 33 (1):349–367, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Garbey:1997:HDD

[GK97] Marc Garbey and Hans G. Kaper. Heterogeneous domain decomposition for singularly perturbed elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 34(4):1513–1544, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28558`.

Gustafson:1970:NCM

[GKR70] S.-A. Gustafson, K. O. Kortanek, and W. Rom. Non-Chebyshevian moment problems. *SIAM Journal on Numerical Analysis*, 7(3):335–342, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

George:1975:NFS

[GL75] Alan George and Wai-Hung Liu. A note on fill for sparse matrices. *SIAM Journal on Numerical Analysis*, 12 (3):452–455, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

George:1978:AMP

[GL78a] Alan George and Joseph W. H. Liu. Algorithms for matrix partitioning and the numerical solution of finite element systems. *SIAM Journal on Numerical Analysis*, 15 (2):297–327, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

George:1978:AND

[GL78b] Alan George and Joseph W. H. Liu. An automatic nested dissection algorithm for irregular finite element problems. *SIAM Journal on Numerical Analysis*, 15 (5):1053–1069, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Garcia:1980:NSP

[GL80a] C. B. García and T. Y. Li. On the number of solutions to polynomial systems of equations. *SIAM Journal on Numerical Analysis*, 17(4):540–546, August 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

George:1980:MSI

[GL80b] Alan George and Joseph W. H. Liu. A minimal storage implementation of the minimum degree algorithm. *SIAM Journal on Numerical Analysis*, 17(2):282–299, April 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gerber:1981:GBM

[GL81] Richard R. Gerber and Franklin T. Luk. A generalized Broyden's method for solving simultaneous linear equations. *SIAM Journal on Numerical Analysis*, 18(5): 882–890, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gottlieb:1983:SCC

[GL83] David Gottlieb and Liviu Lustman. The spectrum of the Chebyshev collocation operator for the heat equation. *SIAM Journal on Numerical Analysis*, 20(5):909–921, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Goodman:1988:GAH

[GL88] Jonathan B. Goodman and Randall J. LeVeque. A geometric approach to high resolution TVD schemes. *SIAM Journal on Numerical Analysis*, 25(2):268–284, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gregory:1993:DVM

[GL93] John Gregory and Cantian Lin. Discrete variable methods for the m-dependent variable nonlinear, extremal problem in the calculus of variations II. *SIAM Journal on Numerical Analysis*, 30 (3):871–881, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Greenberg:1996:WBS

[GL96a] J. M. Greenberg and A. Y. Leroux. A well-balanced scheme for the numerical processing of source terms in hyperbolic equations. *SIAM Journal on Numerical Analysis*, 33(1):1–16, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Guo:1996:FCS

[GL96b] Ben-Yu Guo and Jian Li. Fourier–Chebyshev spectral method for the two-dimensional Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 33(3):1169–1187, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gladwell:1969:SEP

[Gla69a] Ian Gladwell. Some extensions of a paper by Birkhoff and Priver. *SIAM Journal on Numerical Analysis*, 6(2): 294–298, June 1969. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Glasser:1969:NST

[Gla69b] David Glasser. Numerical solution of two-point boundary value problems on total differential equations. *SIAM Journal on Numerical Analysis*, 6 (4):591–597, December 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Greenberg:1997:AAC

[GLBN97] J. M. Greenberg, A. Y. LeRoux, R. Baraille, and A. Noussair. Analysis and approximation of conservation laws with source terms. *SIAM Journal on Numerical Analysis*, 34 (5):1980–2007, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28675`.

Grippo:1986:NLS

[GLL86] L. Grippo, F. Lampariello, and S. Lucidi. A nonmonotone line search technique for Newton's method. *SIAM Journal on Numerical Analysis*, 23(4):707–716, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gottlieb:1987:CSM

[GLT87a] David Gottlieb, Liviu Lustman, and Eitan Tadmor. Convergence of spectral methods for hyperbolic initial-boundary value systems. *SIAM Journal on Numerical Analysis*, 24(3):532–537, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gottlieb:1987:SAS

[GLT87b] David Gottlieb, Liviu Lustman, and Eitan Tadmor. Stability analysis of spectral methods for hyperbolic initial-boundary value systems. *SIAM Journal on Numerical Analysis*, 24(2): 241–256, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ganguly:1991:SMV

[GLV91] Keshab Ganguly, J. Todd Lee, and H. D. Victory, Jr. On simulation methods for Vlasov–Poisson systems with particles initially asymptotically distributed. *SIAM Journal on Numerical Analysis*, 28(6): 1574–1609, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gourlay:1966:TLD

[GM66] A. R. Gourlay and A. R. Mitchell. Two-level difference schemes for hyperbolic systems. *SIAM Journal on Numerical Analysis*, 3(3):474–485, September 1966. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Gourlay:1969:CSD

[GM69a] A. R. Gourlay and A. R. Mitchell. A classification of split difference methods for hyperbolic equations in several space dimensions. *SIAM Journal on Numerical Analysis*, 6(1):62–71, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gourlay:1969:ECA

[GM69b] A. R. Gourlay and A. R. Mitchell. The equivalence of certain alternating direction and locally one-dimensional difference methods. *SIAM Journal on Numerical Analysis*, 6(1):37–46, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Geddes:1975:PAP

[GM75] K. O. Geddes and J. C. Mason. Polynomial approximation by projections on the unit circle. *SIAM Journal on Numerical Analysis*, 12(1): 111–120, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

George:1978:AMD

[GM78a] Alan George and David R. McIntyre. On the application of the minimum degree algorithm to finite element systems. *SIAM Journal on Numerical Analysis*, 15(1): 90–112, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gill:1978:ASN

[GM78b] Philip E. Gill and Walter Murray. Algorithms for the solution of the nonlinear least-squares problem. *SIAM Journal on Numerical Analysis*, 15(5):977–992, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Grundmann:1978:IIF

[GM78c] Axel Grundmann and H. M. Möller. Invariant integration formulas for the n-simplex by combinatorial methods. *SIAM Journal on Numerical Analysis*, 15(2): 282–290, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gourlay:1980:EFO

[GM80] A. R. Gourlay and J. Ll. Morris. The extrapolation of first order methods for parabolic partial differential equations. II. *SIAM Journal on Numerical Analysis*, 17(5):641–655, October 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Genz:1983:IFF

[GM83] A. C. Genz and A. A. Malik. An imbedded family of fully symmetric numerical integration rules. *SIAM Journal on Numerical Analysis*, 20 (3):580–588, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Goldfarb:1989:SCV

[GM89] Donald Goldfarb and Sanjay Mehrotra. A self-correcting version of Karmarkar's algorithm. *SIAM Journal on Numerical Analysis*, 26(4):1006–1015, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Guo:1991:PFE

[GM91] Ben-Yu Guo and He-Ping Ma. A pseudospectral finite-element method for solving two-dimensional vorticity equations. *SIAM Journal on Numerical Analysis*, 28(1): 113–132, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Guo:1993:CFE

[GM93] Ben Yu Guo and He Ping Ma. Combined finite element and pseudospectral method for the two-dimensional evolutionary Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 30(4):1066–1083, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Guillaume:1997:STH

[GM97] Philippe Guillaume and Mohamed Masmoudi. Solution to the time-harmonic Maxwell's equations in a waveguide; use of higher-order derivatives for solving the discrete problem. *SIAM Journal on Numerical Analysis*, 34 (4):1306–1330, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27207`.

Greenberg:1998:OTN

[GM98] Leon Greenberg and Marco Marletta. Oscillation theory and numerical solution of sixth order Sturm–Liouville problems. *SIAM Journal on Numerical Analysis*, 35 (5):2070–2098, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31645`.

Goldstein:1993:PBC

[GMP93] C. I. Goldstein, Thomas A. Manteuffel, and Seymour V. Parter. Preconditioning and boundary conditions without H_2 estimates: L_2 condition numbers and the distribution of the singular values. *SIAM Journal on Numerical Analysis*, 30(2): 343–376, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Guckenheimer:1997:CHB

[GMS97] John Guckenheimer, Mark Myers, and Bernd Sturmfels. Computing Hopf bifurcations. I. *SIAM Journal on Numerical Analysis*, 34(1):1–21, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25346`.

George:1983:ERC

[GN83a] Alan George and Esmond Ng. Erratum: "On row and column orderings for sparse least squares problems" [SIAM J. Numer. Anal. **20** (1983), no. 2, 326–344]. *SIAM Journal on Numerical Analysis*, 20 (4):872, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [GN83b].

George:1983:RCO

[GN83b] Alan George and Esmond Ng. On row and column orderings for sparse least squares problems. *SIAM Journal on Numerical Analysis*, 20(2): 326–344, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See erratum [GN83a].

Gastaldi:1991:QOP

[GN91] Lucia Gastaldi and Ricardo H. Nochetto. Quasi-optimal pointwise error estimates for the Reissner–Mindlin plate. *SIAM Journal on Numerical Analysis*, 28 (2):363–377, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Griewank:1981:NMS

[GO81] Andreas Griewank and M. R. Osborne. Newton's method for singular problems when the dimension of the null space is > 1. *SIAM Journal on Numerical Analysis*, 18(1): 145–149, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Griewank:1983:ANM

[GO83] A. Griewank and M. R. Osborne. Analysis of Newton's method at irregular singularities. *SIAM Journal on Numerical Analysis*, 20(4):747–773, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Goldberg:1977:IIC

[Gol77] Michael A. Goldberg. Invariant imbedding and critical length problems. *SIAM Journal on Numerical Analysis*, 14(1):152–160, March 1977. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic).

Goldstein:1989:AAM

[Gol89] C. I. Goldstein. Analysis and application of multigrid preconditioners for singularly perturbed boundary value problems. *SIAM Journal on Numerical Analysis*, 26 (5):1090–1123, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Goldstein:1991:PSP

[Gol91] C. I. Goldstein. Preconditioning singularity perturbed elliptic and parabolic problems. *SIAM Journal on Numerical Analysis*, 28(5):1386–1418, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Goldstein:1993:MME

[Gol93] Charles I. Goldstein. Multigrid methods for elliptic problems in unbounded domains. *SIAM Journal on Numerical Analysis*, 30(1):159–183, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Goldstein:1994:PNF

[Gol94] Charles I. Goldstein. Preconditioning nonconforming finite element methods. *SIAM Journal on Numerical Analysis*, 31(6):1623–1644, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Goldberg:1998:SDSa

[Gol98a] Moshe Goldberg. Stable difference schemes for parabolic systems — A numerical radius approach. *SIAM Journal on Numerical Analysis*, 35(2):478–493, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31113`.

Goldberg:1998:SDSb

[Gol98b] Moshe Goldberg. Stable difference schemes for parabolic systems — A numerical radius approach II. *SIAM Journal on Numerical Analysis*, 35 (5):1995–2003, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32825`.

Gervasio:1997:SPD

[GOQ97] P. Gervasio, E. Ovtchinnikov, and A. Quarteroni. The spectral projection decomposition method for elliptic equations in two dimensions. *SIAM Journal on Numerical Analysis*, 34 (4):1616–1639, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http:/`

/epubs.siam.org/sam-bin/dbq/article/26533.

Gordon:1971:BFM

[Gor71] William J. Gordon. Blending-function methods of bivariate and multivariate interpolation and approximation. *SIAM Journal on Numerical Analysis*, 8(1):158–177, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gorelick:1975:SFM

[Gor75] Michael R. Gorelick. Stability of families of matrices of unbounded order. *SIAM Journal on Numerical Analysis*, 12 (2):188–202, April 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gottlieb:1972:STD

[Got72] David Gottlieb. Strang-type difference schemes for multidimensional problems. *SIAM Journal on Numerical Analysis*, 9(4):650–661, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gould:1989:CSP

[Gou89] Nicholas Ian Mark Gould. On the convergence of a sequential penalty function method for constrained minimization. *SIAM Journal on Numerical Analysis*, 26(1): 107–128, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Govaerts:1986:GPR

[Gov86] W. Govaerts. The geodesics of Pryce's relative distance in $\mathbf{R}^2_\infty$. *SIAM Journal on Numerical Analysis*, 23(6):1295–1302, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Govaerts:1993:CTB

[Gov93] W. Govaerts. Computation of Takens–Bogdanov type bifurcations with arbitrary codimension. *SIAM Journal on Numerical Analysis*, 30(4): 1121–1133, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Govaerts:1997:CSL

[Gov97] W. Govaerts. Computation of singularities in large nonlinear systems. *SIAM Journal on Numerical Analysis*, 34(3):867–880, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28218.

Golub:1973:DPI

[GP73] G. H. Golub and V. Pereyra. The differentiation of pseudo-inverses and nonlinear least squares problems whose variables separate. *SIAM Journal on Numerical Analysis*, 10 (2):413–432, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gear:1984:OMS

[GP84] C. W. Gear and L. R. Petzold. ODE methods for the solution of differential/algebraic systems. *SIAM Journal on Numerical Analysis*, 21(4):716–728, August 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gonzalez:1998:STS

[GP98] C. González and C. Palencia. Stability of time-stepping methods for abstract time-dependent parabolic problems. *SIAM Journal on Numerical Analysis*, 35(3): 973–989, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28341`.

Gibbs:1976:ARB

[GPS76] Norman E. Gibbs, William G. Poole, Jr., and Paul K. Stockmeyer. An algorithm for reducing the bandwidth and profile of a sparse matrix. *SIAM Journal on Numerical Analysis*, 13(2): 236–250, April 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gabetta:1997:RSN

[GPT97] E. Gabetta, L. Pareschi, and G. Toscani. Relaxation schemes for nonlinear kinetic equations. *SIAM Journal on Numerical Analysis*, 34(6): 2168–2194, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28776`.

George:1978:IND

[GPV78] Alan George, William G. Poole, Jr., and Robert G. Voigt. Incomplete nested dissection for solving n by n grid problems. *SIAM Journal on Numerical Analysis*, 15(4): 662–673, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Girault:1982:AUS

[GR82] V. Girault and P.-A. Raviart. An analysis of upwind schemes for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 19(2): 312–333, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Griewank:1984:CCG

[GR84] A. Griewank and G. W. Reddien. Characterization and computation of generalized turning points. *SIAM Journal on Numerical Analysis*, 21(1): 176–185, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Griewank:1996:ASD

[GR96] A. Griewank and G. W. Reddien. The approximate solution of defining equations for generalized turning points. *SIAM Journal on Numerical Analysis*, 33 (5):1912–1920, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25866`.

Gragg:1965:EAO

[Gra65] William B. Gragg. On extrapolation algorithms for ordinary initial value problems. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(3):384–403, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Grau:1971:SNI

[Gra71] A. A. Grau. The simultaneous Newton improvement of a complete set of approximate factors of a polynomial. *SIAM Journal on Numerical Analysis*, 8(2):425–438, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Grandine:1987:CCS

[Gra87a] Thomas A. Grandine. The computational cost of simplex spline functions. *SIAM Journal on Numerical Analysis*, 24(4):887–890, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Grandine:1987:EIP

[Gra87b] Thomas A. Grandine. The evaluation of inner products of multivariate simplex splines. *SIAM Journal on Numerical Analysis*, 24(4): 882–886, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Greville:1964:NPI

[Gre64] T. N. E. Greville. Numerical procedures for interpolation by spline functions. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??): 53–68, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic).

Greville:1966:SLS

[Gre66] T. N. E. Greville. On stability of linear smoothing formulas. *SIAM Journal on Numerical Analysis*, 3(1): 157–170, March 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Greenbaum:1984:AMM

[Gre84] Anne Greenbaum. Analysis of a multigrid method as an iterative technique for solving linear systems. *SIAM Journal on Numerical Analysis*, 21 (3):473–485, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Greengard:1991:SIT

[Gre91] L. Greengard. Spectral integration and two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 28(4):1071–1080, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gremaud:1994:NAN

[Gre94] Pierre-Alain Gremaud. Numerical analysis of a nonconvex variational problem related to solid-solid phase transitions. *SIAM Journal on Numerical Analysis*, 31(1):111–127, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Green:1999:CMM

[Gre99] J. J. Green. Calculating the maximum modulus of a polynomial using Steckin's lemma. *SIAM Journal on Numerical Analysis*, 36 (4):1022–1029, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33133`.

Griesel:1974:LRT

[Gri74] Martha Ann Griesel. A linear remes-type algorithm for relative error approximation. *SIAM Journal on Numerical Analysis*, 11(1):170–173, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Grigorieff:1986:CSC

[Gri86] Rolf Dieter Grigorieff. On the convergence of stability constants. *SIAM Journal on Numerical Analysis*, 23(4): 832–836, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Griewank:1987:LCB

[Gri87] Andreas Griewank. The local convergence of Broyden-like methods on Lipschitzian problems in Hilbert spaces. *SIAM Journal on Numerical Analysis*, 24(3):684–705, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Grzegorski:1985:OPC

[Grz85] Stanisław M. Grzegórski. Orthogonal projections on convex sets for Newton-like methods. *SIAM Journal on Numerical Analysis*, 22(6): 1208–1219, December 1985.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gries:1967:SRF

[GS67] D. Gries and J. Stoer. Some results on fields of values of a matrix. *SIAM Journal on Numerical Analysis*, 4(2): 283–300, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gragg:1976:SVS

[GS76] W. B. Gragg and G. W. Stewart. A stable variant of the secant method for solving nonlinear equations. *SIAM Journal on Numerical Analysis*, 13 (6):889–903, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gambill:1988:LRW

[GS88] Thomas N. Gambill and Robert D. Skeel. Logarithmic reduction of the wrapping effect with application to ordinary differential equations. *SIAM Journal on Numerical Analysis*, 25(1):153–162, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Glassey:1991:CPM

[GS91a] Robert Glassey and Jack Schaeffer. Convergence of a particle method for the relativistic Vlasov–Maxwell system. *SIAM Journal on Numerical Analysis*, 28(1): 1–25, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gustafsson:1991:NSE

[GS91b] Bertil Gustafsson and Hans Stoor. Navier–Stokes equations for almost incompressible flow. *SIAM Journal on Numerical Analysis*, 28(6): 1523–1547, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gottlieb:1996:GPI

[GS96] David Gottlieb and Chi-Wang Shu. On the Gibbs phenomenon III: Recovering exponential accuracy in a subinterval from a spectral partial sum of a piecewise analytic function. *SIAM Journal on Numerical Analysis*, 33(1): 280–290, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Griffiths:1992:NWP

[GSY92] D. F. Griffiths, A. M. Stuart, and H. C. Yee. Numerical wave propagation in an advection equation with a nonlinear source term. *SIAM Journal on Numerical Analysis*, 29(5):1244–1260, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gear:1974:EVM

[GT74a] C. W. Gear and K. W. Tu. The effect of variable mesh size on the stability of multistep methods. *SIAM Journal on Numerical Analysis*, 11 (5):1025–1043, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gragg:1974:OEB

[GT74b] W. B. Gragg and R. A. Tapia. Optimal error bounds for the Newton–Kantorovich theorem. *SIAM Journal on Numerical Analysis*, 11(1): 10–13, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gutknecht:1982:RPC

[GT82] Martin H. Gutknecht and Lloyd N. Trefethen. Real polynomial Chebyshev approximation by the Carathéodory–Fejér method. *SIAM Journal on Numerical Analysis*, 19 (2):358–371, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gladwell:1985:QAT

[GT85] I. Gladwell and R. M. Thomas. A qualitative analysis of two- and three-step methods for stable second order systems. *SIAM Journal on Numerical Analysis*, 22(3): 535–560, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gautschi:1990:NCI

[GTV90] Walter Gautschi, E. Tychopoulos, and R. S. Varga. A note on the contour integral representation of the remainder term for a Gauss–Chebyshev quadrature rule. *SIAM Journal on Numerical Analysis*, 27(1):219–224, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Goodman:1988:SPI

[GU88] T. N. T. Goodman and K. Unsworth. Shape-preserving interpolation by parametrically defined curves. *SIAM Journal on Numerical Analysis*, 25(6):1453–1465, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Guermond:1992:NQL

[Gue92] Jean-Luc Guermond. Numerical quadratures for layer potentials over curved domains in $\mathbf{R}^3$. *SIAM Journal on Numerical Analysis*, 29(5):1347–1369, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Guirguis:1987:CBI

[Gui87] Georges H. Guirguis. On the coupling boundary integral and finite element methods for the exterior Stokes problem in 3-D. *SIAM Journal on Numerical Analysis*, 24 (2):310–322, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gunn:1965:SED

[Gun65] James E. Gunn. The solution of elliptic difference equations by semi-explicit iterative techniques. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):24–45, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Gunther:1974:TDI

[Gun74] C. Gunther. Third degree integration formulas with four real points and positive weights in two dimensions. *SIAM Journal on Numerical Analysis*, 11(3):480–493, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gunttner:1980:ELC

[Gün80] R. Günttner. Evaluation of Lebesgue constants. *SIAM Journal on Numerical Analysis*, 17(4):512–520, August 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gunttner:1988:AUN

[Gün88] R. Günttner. On asymptotics for the uniform norms of the Lagrange interpolation polynomials corresponding to extended Chebyshev nodes. *SIAM Journal on Numerical Analysis*, 25(2):461–469, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gupta:1975:DEE

[Gup75] Murli M. Gupta. Discretization error estimates for certain splitting procedures for solving first biharmonic boundary value problems. *SIAM Journal on Numerical Analysis*, 12(3):364–377, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gupta:1985:ABV

[Gup85a] Suchitra Gupta. An adaptive boundary value Runge–Kutta solver for first order boundary value problems. *SIAM Journal on Numerical Analysis*, 22(1):114–126, February 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See corrigenda [Gup85b].

Gupta:1985:CAB

[Gup85b] Suchitra Gupta. Corrigenda: "An adaptive boundary value Runge–Kutta solver for first order boundary value problems" [SIAM J. Numer. Anal. **22** (1985), no. 1, 114–126]. *SIAM Journal on Numerical Analysis*, 22(6): 1255, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [Gup85a].

Gustafsson:1969:DAH

[Gus69] Bertil Gustafsson. On difference approximations to hyperbolic differential equations over long time intervals. *SIAM Journal on Numerical Analysis*, 6(3):508–522, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gustafson:1970:CSC

[Gus70] S.-A. Gustafson. On the computational solution of a class of generalized moment problems. *SIAM Journal on Numerical Analysis*, 7(3):343–357, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gustafson:1973:MCL

[Gus73] Sven-Åke Gustafson. A method of computing limit values. *SIAM Journal on Numerical Analysis*, 10(6):1080–1090, December 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gustafsson:1980:AEH

[Gus80] Bertil Gustafsson. Asymptotic expansions for hyperbolic problems with different time-scales. *SIAM Journal on Numerical Analysis*, 17(5): 623–634, October 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gusmann:1981:BGP

[Güs81a] Bernd Güsmann. Bounds of Galerkin projections on splines with highly nonuniform meshes. *SIAM Journal on Numerical Analysis*, 18(6): 1109–1119, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gustafsson:1981:CRD

[Gus81b] Bertil Gustafsson. The convergence rate for difference approximations to general mixed initial-boundary value problems. *SIAM Journal on Numerical Analysis*, 18(2): 179–190, April 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gutknecht:1983:CCT

[Gut83] Martin H. Gutknecht. On the computation of the conjugate trigonometric rational function and on a related splitting problem. *SIAM Journal on Numerical Analysis*, 20(6): 1198–1205, December 1983.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gutknecht:1993:CNC

[Gut93] Martin H. Gutknecht. Changing the norm in conjugate gradient type algorithms. *SIAM Journal on Numerical Analysis*, 30(1):40–56, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Golub:1974:CBS

[GV74] G. H. Golub and J. M. Varah. On a characterization of the best l_2-scaling of a matrix. *SIAM Journal on Numerical Analysis*, 11(3):472–479, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Golub:1980:ATLb

[GV80] Gene H. Golub and Charles F. Van Loan. An analysis of the total least squares problem. *SIAM Journal on Numerical Analysis*, 17(6):883–893, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://www.jstor.org/stable/2156807`. Reprinted in [CGO07].

Gautschi:1983:EBG

[GV83] Walter Gautschi and Richard S. Varga. Error bounds for Gaussian quadrature of analytic functions. *SIAM Journal on Numerical Analysis*, 20(6):1170–1186, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ganguly:1989:CPM

[GV89] Keshab Ganguly and H. D. Victory, Jr. On the convergence of particle methods for multidimensional Vlasov–Poisson systems. *SIAM Journal on Numerical Analysis*, 26(2):249–288, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gallouet:1991:FVS

[GV91] T. Gallouët and J.-P. Vila. Finite volume schemes for conservation laws of mixed type. *SIAM Journal on Numerical Analysis*, 28(6):1548–1573, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gear:1974:SCV

[GW74a] C. W. Gear and D. S. Watanabe. Stability and convergence of variable order multistep methods. *SIAM Journal on Numerical Analysis*, 11(5):1044–1058, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gordon:1974:PHI

[GW74b] William J. Gordon and James A. Wixom. Pseudo-harmonic interpolation on convex domains. *SIAM Journal on Numerical Analysis*, 11(5):909–933, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gragg:1983:TCR

[GW83] W. B. Gragg and D. D. Warner. Two constructive results in continued fractions. *SIAM Journal on Numerical Analysis*, 20(6):1187–1197, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gregory:1990:DVM

[GW90] John Gregory and R. S. Wang. Discrete variable methods for the m-dependent variable, nonlinear extremal problem in the calculus of variations. *SIAM Journal on Numerical Analysis*, 27(2):470–487, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gray:1992:NMA

[GW92] H. L. Gray and Suojin Wang. A new method for approximating improper integrals. *SIAM Journal on Numerical Analysis*, 29(1):271–283, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gatica:1997:CMF

[GW97] Gabriel N. Gatica and Wolfgang L. Wendland. Coupling of mixed finite elements and boundary elements for a hyperelastic interface problem. *SIAM Journal on Numerical Analysis*, 34(6):2335–2356, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29131`.

Greenwell-Yanik:1986:ASC

[GYF86] C. E. Greenwell-Yanik and G. Fairweather. Analyses of spline collocation methods for parabolic and hyperbolic problems in two space variables. *SIAM Journal on Numerical Analysis*, 23(2):282–296, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gregory:1988:SMT

[GZ88] John Gregory and Marvin Zeman. Spline matrices and their applications to some higher order methods for boundary value problems. *SIAM Journal on Numerical Analysis*, 25(2):399–410, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Haase:1996:ESR

[Haa96] Mark C. Haase. Extra smoothness requirements for Galerkin methods for the wave equation. *SIAM Journal on Numerical Analysis*, 33 (5):1962–1968, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26781`.

Haber:1977:TRN

[Hab77] Seymour Haber. The tanh rule for numerical integration. *SIAM Journal on Numerical Analysis*, 14(4):668–685, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hackbusch:1979:CAE

[Hac79] W. Hackbusch. On the computation of approximate eigenvalues and eigenfunctions of elliptic operators by means of a multi-grid method. *SIAM Journal on Numerical Analysis*, 16(2): 201–215, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hackbusch:1981:OEE

[Hac81] W. Hackbusch. Optimal $H^{p,p/2}$ error estimates for a parabolic Galerkin method. *SIAM Journal on Numerical Analysis*, 18(4):681–692, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hager:1975:RTM

[Hag75] William W. Hager. The Ritz–Trefftz method for state and control constrained optimal control problems. *SIAM Journal on Numerical Analysis*, 12(6):854–867, December 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hager:1976:RCD

[Hag76] William W. Hager. Rates of convergence for discrete approximations to unconstrained control problems. *SIAM Journal on Numerical Analysis*, 13(4):449–472, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hager:1985:AMM

[Hag85] William W. Hager. Approximations to the multiplier method. *SIAM Journal on Numerical Analysis*, 22(1): 16–46, February 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hagstrom:1986:AEB

[Hag86] Thomas M. Hagstrom. Asymptotic expansions and boundary conditions for time-dependent problems. *SIAM*

Journal on Numerical Analysis, 23(5):948–958, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hager:1990:MMN

[Hag90] William W. Hager. Multiplier methods for nonlinear optimal control. *SIAM Journal on Numerical Analysis*, 27(4): 1061–1080, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hakopian:1982:MSF

[Hak82] Hakop Hakopian. Multivariate spline functions, *B*-spline basis and polynomial interpolations. *SIAM Journal on Numerical Analysis*, 19(3): 510–517, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hall:1973:NCB

[Hal73] C. A. Hall. Natural cubic and bicubic spline interpolation. *SIAM Journal on Numerical Analysis*, 10(6):1055–1060, December 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hall:1974:SAP

[Hal74] George Hall. Stability analysis of predictor-corrector algorithms of Adams type. *SIAM Journal on Numerical Analysis*, 11(3):494–505, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hald:1979:CVM

[Hal79] Ole H. Hald. Convergence of vortex methods for Euler's equations. II. *SIAM Journal on Numerical Analysis*, 16(5): 726–755, October 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hald:1987:CVM

[Hal87a] Ole H. Hald. Convergence of vortex methods for Euler's equations. III. *SIAM Journal on Numerical Analysis*, 24 (3):538–582, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Haley:1987:SMM

[Hal87b] Stephen B. Haley. Solution of modified matrix equations. *SIAM Journal on Numerical Analysis*, 24(4):946–951, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hammer:1964:TA

[Ham64] Preston C. Hammer. Topologies of approximation. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??):69–75, ???? 1964. ISSN 0887-

459X (print), 1095-7170 (electronic).

Hansen:1965:IAM

[Han65a] Eldon Hansen. Interval arithmetic in matrix computations, Part I. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2): 308–320, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Hanson:1965:EBC

[Han65b] M. A. Hanson. Error bounds in constrained best approximation. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(3):473–479, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Hanson:1971:NMS

[Han71] Richard J. Hanson. A numerical method for solving Fredholm integral equations of the first kind using singular values. *SIAM Journal on Numerical Analysis*, 8(3):616–622, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hansen:1992:BSI

[Han92] E. R. Hansen. Bounding the solution of interval linear equations. *SIAM Journal on Numerical Analysis*, 29 (5):1493–1503, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hanisch:1993:MPB

[Han93a] M. R. Hanisch. Multigrid preconditioning for the biharmonic Dirichlet problem. *SIAM Journal on Numerical Analysis*, 30(1):184–214, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hanke:1993:FPS

[Han93b] Martin Hanke. An ϵ-free a posteriori stopping rule for certain iterative regularization methods. *SIAM Journal on Numerical Analysis*, 30(4): 1208–1228, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Harabetian:1990:NMV

[Har90] Eduard Harabetian. A numerical method for viscous perturbations of hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 27(4):870–884, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Harten:1996:MRD

[Har96] Ami Harten. Multiresolution representation of data: A general framework. *SIAM Journal on Numerical Analysis*, 33(3):1205–1256, June 1996.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hatcher:1982:EBC

[Hat82] Theodore R. Hatcher. An error bound for certain successive overrelaxation schemes. *SIAM Journal on Numerical Analysis*, 19(5):930–941, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Haussmann:1971:ID

[Hau71] Werner Haussmann. On interpolation with derivatives. *SIAM Journal on Numerical Analysis*, 8(3):483–485, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Haviv:1987:ADM

[Hav87] Moshe Haviv. Aggregation/disaggregation methods for computing the stationary distribution of a Markov chain. *SIAM Journal on Numerical Analysis*, 24(4):952–966, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hayes:1981:GAD

[Hay81a] Linda J. Hayes. Galerkin alternating-direction methods for nonrectangular regions using patch approximations. *SIAM Journal on Numerical Analysis*, 18(4):627–643, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hayes:1981:MBT

[Hay81b] Linda J. Hayes. A modified backward time discretization for nonlinear parabolic equations using patch approximations. *SIAM Journal on Numerical Analysis*, 18(5):781–793, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hawkins:1986:NSC

[HB86] W. G. Hawkins and H. H. Barrett. A numerically stable circular harmonic reconstruction algorithm. *SIAM Journal on Numerical Analysis*, 23(4):873–890, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Herceg:1986:ND

[HC86] Dragoslav Herceg and Ljiljana Cvetković. On a numerical differentiation. *SIAM Journal on Numerical Analysis*, 23(3):686–691, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Han:1997:QNA

[HDS97] Weimin Han, B. Daya Reddy, and Gregory C. Schroeder. Qualitative and numerical analysis of quasi-static problems in elastoplasticity. *SIAM Journal on Numerical Analysis*, 34(1):143–177, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26538`.

Hebden:1971:BDB

[Heb71] M. D. Hebden. A bound on the difference between the Chebyshev norm and the holder norms of a function. *SIAM Journal on Numerical Analysis*, 8(2):270–277, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hedstrom:1968:RCS

[Hed68] G. W. Hedstrom. The rate of convergence of some difference schemes. *SIAM Journal on Numerical Analysis*, 5 (2):363–406, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hedstrom:1979:GMB

[Hed79] G. W. Hedstrom. The Galerkin method based on Hermite cubics. *SIAM Journal on Numerical Analysis*, 16 (3):385–393, June 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hull:1972:CNM

[HEFS72] T. E. Hull, W. H. Enright, B. M. Fellen, and A. E. Sedgwick. Comparing numerical methods for ordinary differential equations. *SIAM Journal on Numerical Analysis*, 9(4):603–637, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See errata [HEFS74].

Hull:1974:ECN

[HEFS74] T. E. Hull, W. H. Enright, B. M. Fellen, and A. E. Sedgwick. Errata: "Comparing Numerical Methods for Ordinary Differential Equations" [SIAM J. Numer. Anal. **9** (1972), no. 4, 603–637]. *SIAM Journal on Numerical Analysis*, 11(3):681, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [HEFS72].

Hegland:1992:OOR

[Heg92] Markus Hegland. An optimal order regularization method which does not use additional smoothness assumptions. *SIAM Journal on Numerical Analysis*, 29(5):1446–1461, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Heins:1966:PWZ

[Hei66] Maurice Heins. On the pseudoperiods of the Weierstrass zeta functions. *SIAM Journal on Numerical Analysis*, 3 (2):266–268, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Heinrichs:1993:DDF

[Hei93a] Wilhelm Heinrichs. Domain decomposition for fourth-order problems. *SIAM Journal on Numerical Analysis*, 30 (2):435–453, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Heinrichs:1993:STP

[Hei93b] Wilhelm Heinrichs. Splitting techniques for the pseudospectral approximation of the unsteady Stokes equations. *SIAM Journal on Numerical Analysis*, 30(1):19–39, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Heise:1994:AFD

[Hei94] Bodo Heise. Analysis of a fully discrete finite element method for a nonlinear magnetic field problem. *SIAM Journal on Numerical Analysis*, 31(3):745–759, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Heinrich:1996:FFE

[Hei96] Bernd Heinrich. The Fourier-finite-element method for Poisson's equation in axisymmetric domains with edges. *SIAM Journal on Numerical Analysis*, 33(5): 1885–1911, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26610`.

Heinkenschloss:1998:TRM

[Hei98a] Matthias Heinkenschloss. A trust region method for norm constrained problems. *SIAM Journal on Numerical Analysis*, 35(4):1594–1620, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27398`.

Heinrichs:1998:STU

[Hei98b] Wilhelm Heinrichs. Splitting techniques for the unsteady Stokes equations. *SIAM Journal on Numerical Analysis*, 35 (4):1646–1662, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30878`.

Heller:1974:DTA

[Hel74] Don Heller. A determinant theorem with applications to parallel algorithms. *SIAM Journal on Numerical Analysis*, 11(3):559–568, June 1974. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic).

Heller:1976:SAC

[Hel76] Don Heller. Some aspects of the cyclic reduction algorithm for block tridiagonal linear systems. *SIAM Journal on Numerical Analysis*, 13 (4):484–496, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Henrici:1966:AAC

[Hen66] Peter Henrici. An algorithm for analytic continuation. *SIAM Journal on Numerical Analysis*, 3(1):67–78, March 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Henry:1969:BAS

[Hen69] Myron S. Henry. A best approximate solution of certain nonlinear differential equations. *SIAM Journal on Numerical Analysis*, 6(1):143–148, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Henrici:1970:UBA

[Hen70a] Peter Henrici. Upper bounds for the abscissa of stability of a stable polynomial. *SIAM Journal on Numerical Analysis*, 7(4):538–544, December 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Henry:1970:SBA

[Hen70b] Myron S. Henry. A sequence of best approximate solutions of $y'' = F(x, y, y')$. *SIAM Journal on Numerical Analysis*, 7(1):129–133, March 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Herring:1967:NGI

[Her67] Gary P. Herring. A note on generalized interpolation and the pseudoinverse. *SIAM Journal on Numerical Analysis*, 4(4):548–556, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hersh:1968:TDS

[Her68] R. Hersh. On the theory of difference schemes for mixed initial boundary value problems. *SIAM Journal on Numerical Analysis*, 5(2): 436–450, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hertling:1975:NTA

[Her75] Jorg Hertling. Numerical treatment of algebraic integral equations by variational methods. *SIAM Journal on Numerical Analysis*, 12(2): 203–212, April 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Herr:1976:SWM

[Her76] David G. Herr. On Strand and Westwater's minimum-RMS estimation of the numerical solution of a Fredholm integral equation of the first kind. *SIAM Journal on Numerical Analysis*, 13(3): 427–431, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Herron:1985:CCD

[Her85] Gary Herron. A characterization of certain C^1 discrete triangular interpolants. *SIAM Journal on Numerical Analysis*, 22(4):811–819, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hesthaven:1998:EAO

[Hes98a] J. S. Hesthaven. From electrostatics to almost optimal nodal sets for polynomial interpolation in a simplex. *SIAM Journal on Numerical Analysis*, 35(2): 655–676, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30587`.

Hesthaven:1998:IPP

[Hes98b] J. S. Hesthaven. Integration preconditioning of pseudospectral operators. I. basic linear operators. *SIAM Journal on Numerical Analysis*, 35 (4):1571–1593, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31918`.

Henry:1978:NCA

[HHS78] J. N. Henry, M. S. Henry, and D. Schmidt. Numerical comparisons of algorithms for polynomial and rational multivariate approximations. *SIAM Journal on Numerical Analysis*, 15(6):1197–1207, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See errata [de 78a].

Hickernell:1996:QEB

[Hic96] Fred J. Hickernell. Quadrature error bounds with applications to lattice rules. *SIAM Journal on Numerical Analysis*, 33(5):1995–2016, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26143`. See erratum [Hic97].

Hickernell:1997:EQE

[Hic97] Fred J. Hickernell. Erratum: "Quadrature error bounds with applications to lattice rules" [SIAM J. Numer. Anal. **33** (1996), no. 5, 1995–2016; MR 1 411 860]. *SIAM Journal on Numerical Analysis*, 34(2):853–866, April 1997.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/97400. See [Hic96].

Hiebert:1980:SSL

[Hie80] Kathie L. Hiebert. Solving systems of linear equations and inequalities. *SIAM Journal on Numerical Analysis*, 17 (3):447–464, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Higdon:1984:BCS

[Hig84] Robert L. Higdon. Boundary conditions for suppressing rapidly moving components in hyperbolic systems. *SIAM Journal on Numerical Analysis*, 21(3):413–432, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Higham:1989:RDC

[Hig89a] Desmond J. Higham. Robust defect control with Runge–Kutta schemes. *SIAM Journal on Numerical Analysis*, 26 (5):1175–1183, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Higham:1989:AST

[Hig89b] Nicholas J. Higham. The accuracy of solutions to triangular systems. *SIAM Journal on Numerical Analysis*, 26 (5):1252–1265, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Higdon:1990:RBC

[Hig90] Robert L. Higdon. Radiation boundary conditions for elastic wave propagation. *SIAM Journal on Numerical Analysis*, 27(4):831–869, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Higdon:1994:RBC

[Hig94] Robert L. Higdon. Radiation boundary conditions for dispersive waves. *SIAM Journal on Numerical Analysis*, 31(1): 64–100, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hill:1968:NSD

[Hil68] C. Denson Hill. On the numerical solution of degenerate elliptic-parabolic equations. *SIAM Journal on Numerical Analysis*, 5(4):717–724, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hilgers:1976:ERC

[Hil76] John W. Hilgers. On the equivalence of regularization and certain reproducing kernel Hilbert space approaches for solving first kind problems. *SIAM Journal on*

Numerical Analysis, 13(2): 172–184, April 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See erratum [Hil78].

Hilgers:1978:EER

[Hil78] J. W. Hilgers. Erratum: "On the Equivalence of Regularization and Certain Reproducing Kernel Hilbert Space Approaches for Solving First Kind Problems" [SIAM J. Numer. Anal. **13** (1976), no. 2, 172–184]. *SIAM Journal on Numerical Analysis*, 15(6): 1301, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [Hil76].

Hilgers:1980:NEO

[Hil80] John W. Hilgers. A note on estimating the optimal regularization parameter. *SIAM Journal on Numerical Analysis*, 17(3):472–473, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hill:1997:GDS

[Hil97] A. T. Hill. Global dissipativity for *A*-stable methods. *SIAM Journal on Numerical Analysis*, 34(1):119–142, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27097`.

Hindmarsh:1972:OCR

[Hin72] A. C. Hindmarsh. Optimality in a class of rootfinding algorithms. *SIAM Journal on Numerical Analysis*, 9(2): 205–214, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hiptmair:1999:MMM

[Hip99] R. Hiptmair. Multigrid method for Maxwell's equations. *SIAM Journal on Numerical Analysis*, 36(1):204–225, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32620`.

Han:1999:OIS

[HJ99] Bin Han and Rong-Qing Jia. Optimal interpolatory subdivision schemes in multidimensional spaces. *SIAM Journal on Numerical Analysis*, 36 (1):105–124, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32561`.

Hersh:1979:HAS

[HK79] Reuben Hersh and Tosio Kato. High-accuracy stable difference schemes for well-posed initial value problems. *SIAM Journal on Numerical Analysis*, 16(4):670–

682, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hicks:1991:EBN

[HK91] D. L. Hicks and K. L. Kuttler. Error bounds for numerical solutions to hydrodynamical problems involving shocks. *SIAM Journal on Numerical Analysis*, 28(3):662–684, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hoppe:1994:AMM

[HK94] R. H. W. Hoppe and R. Kornhuber. Adaptive multilevel methods for obstacle problems. *SIAM Journal on Numerical Analysis*, 31(2): 301–323, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hangelbroek:1977:CMI

[HKL77] Rutger J. Hangelbroek, Hans G. Kaper, and Gary K. Leaf. Collocation methods for integro-differential equations. *SIAM Journal on Numerical Analysis*, 14(3):377–390, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Heinkenschloss:1992:FAN

[HKT92] M. Heinkenschloß, C. T. Kelley, and H. T. Tran. Fast algorithms for nonsmooth compact fixed-point problems. *SIAM Journal on Numerical Analysis*, 29(6):1769–1792, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Harten:1981:RCF

[HL81] Amiram Harten and Peter D. Lax. A random choice finite difference scheme for hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 18(2): 289–315, April 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hickey:1982:RMM

[HL82] Kevin R. Hickey and Glenn R. Luecke. Remarks on Marti's method for solving first kind equations [SIAM J. Numer. Anal. **15** (1978), no. 6, 1071–1076, by J. T. Marti]. *SIAM Journal on Numerical Analysis*, 19(3):623–628, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [Mar78].

Hairer:1984:SVR

[HL84a] E. Hairer and Ch. Lubich. On the stability of Volterra–Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 21(1):123–135, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Harten:1984:CHR

[HL84b] Ami Harten and Peter D. Lax. On a class of high resolution total-variation-stable finite-difference schemes. *SIAM Journal on Numerical Analysis*, 21(1):1–23, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). With an appendix by Peter D. Lax.

Harrell:1987:EGM

[HL87] E. M. Harrell and W. J. Layton. L^2 estimates for Galerkin methods for semilinear elliptic equations. *SIAM Journal on Numerical Analysis*, 24(1): 52–58, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hochbruck:1997:KSA

[HL97] Marlis Hochbruck and Christian Lubich. On Krylov subspace approximations to the matrix exponential operator. *SIAM Journal on Numerical Analysis*, 34(5): 1911–1925, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28057`.

Hayes:1998:NSK

[HL98] Brian T. Hayes and Philippe G. LeFloch. Nonclassical shocks and kinetic relations: Finite difference schemes. *SIAM Journal on Numerical Analysis*, 35(6):2169–2194, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31599`.

Hou:1991:CPV

[HLK91] Thomas Y. Hou, John Lowengrub, and Robert Krasny. Convergence of a point vortex method for vortex sheets. *SIAM Journal on Numerical Analysis*, 28(2):308–320, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Harten:1998:CEH

[HLLnWJM98] Ami Harten, Peter D. Lax, C. David Levermore, and newline William J. Morokoff. Convex entropies and hyperbolicity for general Euler equations. *SIAM Journal on Numerical Analysis*, 35(6): 2117–2127, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31670`.

Hairer:1983:OCO

[HLN83] E. Hairer, Ch. Lubich, and S. P. Nørsett. Order of convergence of one-step methods for Volterra integral equations of the second kind. *SIAM Journal on Numerical Analysis*, 20

(3):569–579, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hageman:1980:ECI

[HLY80] Louis A. Hageman, Franklin T. Luk, and David M. Young. On the equivalence of certain iterative acceleration methods. *SIAM Journal on Numerical Analysis*, 17(6):852–873, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hamilton:1976:FES

[HM76a] J. D. Hamilton and H. D. Meyer. Finite element solutions for steady state viscoplastic flow. *SIAM Journal on Numerical Analysis*, 13(6):940–943, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Holyhead:1976:SCM

[HM76b] P. A. W. Holyhead and S. McKee. Stability and convergence of multistep methods for linear Volterra integral equations of the first kind. *SIAM Journal on Numerical Analysis*, 13(2):269–292, April 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hald:1985:CLQ

[HM85] Jørgen Hald and Kaj Madsen. Combined LP and quasi-Newton methods for nonlinear L_1 optimization. *SIAM Journal on Numerical Analysis*, 22(1):68–80, February 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hanke:1998:ACL

[HMM98] Michael Hanke, Ebroul Izquierdo Macana, and Roswitha März. On asymptotics in case of linear index-2 differential-algebraic equations. *SIAM Journal on Numerical Analysis*, 35(4):1326–1346, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26887`.

Hu:1995:ADS

[HMMR95] X. C. Hu, T. A. Manteuffel, S. McCormick, and T. F. Russell. Accurate discretization for singular perturbations: The one-dimensional case. *SIAM Journal on Numerical Analysis*, 32(1):83–109, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hoffman:1973:CBR

[HMR73] Alan J. Hoffman, Michael S. Martin, and Donald J. Rose.

Complexity bounds for regular finite difference and finite element grids. *SIAM Journal on Numerical Analysis*, 10 (2):364–369, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Holyhead:1975:MMS

[HMT75] P. A. W. Holyhead, S. McKee, and P. J. Taylor. Multistep methods for solving linear Volterra integral equations of the first kind. *SIAM Journal on Numerical Analysis*, 12(5):698–711, October 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hunt:1975:VIA

[HN75] Charles Hunt and Nabil R. Nassif. On a variational inequality and its approximation, in the theory of semiconductors. *SIAM Journal on Numerical Analysis*, 12 (6):938–950, December 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Harten:1987:UHO

[HO87] Ami Harten and Stanley Osher. Uniformly high-order accurate nonoscillatory schemes. I. *SIAM Journal on Numerical Analysis*, 24(2): 279–309, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hofer:1976:PIM

[Hof76] E. Hofer. A partially implicit method for large stiff systems of ODE's with only few equations introducing small time-constants. *SIAM Journal on Numerical Analysis*, 13(5): 645–663, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hoff:1978:SCF

[Hof78] David Hoff. Stability and convergence of finite difference methods for systems of nonlinear reaction-diffusion equations. *SIAM Journal on Numerical Analysis*, 15(6):1161–1177, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hoff:1985:SCS

[Hof85] David Hoff. A scheme for computing solutions and interface curves for a doubly-degenerate parabolic equation. *SIAM Journal on Numerical Analysis*, 22(4):687–712, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hohage:1999:CRR

[Hoh99] Thorsten Hohage. Convergence rates of a regularized Newton method in sound-hard inverse scattering. *SIAM Journal on Nu-*

merical Analysis, 36(1):125–142, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32775`.

Holley:1978:EEB

[Hol78] Richard Holley. Exact error bounds for the phase velocity in an acoustic wave guide. *SIAM Journal on Numerical Analysis*, 15(4):715–735, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hollig:1982:MS

[Höl82] Klaus Höllig. Multivariate splines. *SIAM Journal on Numerical Analysis*, 19(5):1013–1031, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hong:1993:CMB

[Hon93] Bin Hong. On the computation of multiple bifurcations with multiple parameters and symmetry. *SIAM Journal on Numerical Analysis*, 30(4):1134–1154, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hoppe:1982:DAC

[Hop82] Ronald H. W. Hoppe. Discrete approximations of cosine operator functions. I. *SIAM Journal on Numerical Analysis*, 19(6):1110–1128, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hoppe:1987:MAV

[Hop87] Ronald H. W. Hoppe. Multigrid algorithms for variational inequalities. *SIAM Journal on Numerical Analysis*, 24(5):1046–1065, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Horn:1983:FFO

[Hor83] M. K. Horn. Fourth- and fifth-order, scaled Runge–Kutta algorithms for treating dense output. *SIAM Journal on Numerical Analysis*, 20(3):558–568, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hosea:1995:NRC

[Hos95] M. E. Hosea. A new recurrence for computing Runge–Kutta truncation error coefficients. *SIAM Journal on Numerical Analysis*, 32(6):1989–2001, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Householder:1973:GFJ

[Hou73] A. S. Householder. George E. Forsythe (January 8, 1917–April 9, 1972). *SIAM Journal* on *Numerical Analysis*, 10: viii–xi, 1973. CODEN SJNAAM. ISSN 1095-7170. Collection of articles dedicated to the memory of George E. Forsythe.

Hou:1990:CVB

[Hou90] Thomas Y. Hou. Convergence of a variable blob vortex method for the Euler and Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 27(6):1387–1404, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hall:1968:CMEb

[HP68a] C. A. Hall and T. A. Porsching. Computing the maximal eigenvalue and eigenvector of a nonnegative irreducible matrix. *SIAM Journal on Numerical Analysis*, 5(3):470–474, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hall:1968:CMEa

[HP68b] C. A. Hall and T. A. Porsching. Computing the maximal eigenvalue and eigenvector of a positive matrix. *SIAM Journal on Numerical Analysis*, 5(2): 269–274, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hageman:1975:ANB

[HP75] L. A. Hageman and T. A. Porsching. Aspects of nonlinear block successive overrelaxation. *SIAM Journal on Numerical Analysis*, 12(3): 316–335, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Haegemans:1977:CCF

[HP77] Ann Haegemans and Robert Piessens. Construction of cubature formulas of degree seven and nine symmetric planar regions, using orthogonal polynomials. *SIAM Journal on Numerical Analysis*, 14(3): 492–508, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hanosn:1978:NST

[HP78a] Richard L. Hanson and James L. Phillips. Numerical solution of two-dimensional integral equations using linear elements. *SIAM Journal on Numerical Analysis*, 15(1): 113–121, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hoffmann:1978:NPG

[HP78b] W. Hoffmann and B. N. Parlett. A new proof of global convergence for the tridiagonal QL algorithm. *SIAM Journal on Numerical Analysis*, 15(5):929–937, October

1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hall:1980:PAF

[HP80] C. A. Hall and T. A. Porsching. Padé approximants, fractional step methods and Navier–Stokes discretizations. *SIAM Journal on Numerical Analysis*, 17 (6):840–851, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Heywood:1982:FEA

[HR82] John G. Heywood and Rolf Rannacher. Finite element approximation of the nonstationary Navier–Stokes problem. I. regularity of solutions and second-order error estimates for spatial discretization. *SIAM Journal on Numerical Analysis*, 19(2): 275–311, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Heywood:1986:FEA

[HR86] John G. Heywood and Rolf Rannacher. Finite element approximation of the nonstationary Navier–Stokes problem, Part II: Stability of solutions and error estimates uniform in time. *SIAM Journal on Numerical Analysis*, 23(4): 750–777, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Heywood:1988:FEA

[HR88] John G. Heywood and Rolf Rannacher. Finite element approximation of the nonstationary Navier–Stokes problem, Part III. smoothing property and higher order error estimates for spatial discretization. *SIAM Journal on Numerical Analysis*, 25(3): 489–512, June 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Heywood:1990:FEA

[HR90] John G. Heywood and Rolf Rannacher. Finite-element approximation of the nonstationary Navier–Stokes problem. Part IV: Error analysis for second-order time discretization. *SIAM Journal on Numerical Analysis*, 27(2): 353–384, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Heywood:1993:QTM

[HR93] John G. Heywood and Rolf Rannacher. On the question of turbulence modeling by approximate inertial manifolds and the nonlinear Galerkin method. *SIAM Journal on Numerical Analysis*, 30(6): 1603–1621, December 1993. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic).

Han:1995:FEM

[HR95] Weimin Han and B. Daya Reddy. On the finite element method for mixed variational inequalities arising in elastoplasticity. *SIAM Journal on Numerical Analysis*, 32(6): 1778–1807, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Huang:1997:AMM

[HR97] Weizhang Huang and Robert D. Russell. Analysis of moving mesh partial differential equations with spatial smoothing. *SIAM Journal on Numerical Analysis*, 34 (3):1106–1126, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25644`.

Hoch:1999:NSP

[HR99] Philippe Hoch and Michel Rascle. A numerical study of a pathological example of p-system. *SIAM Journal on Numerical Analysis*, 36 (5):1588–1603, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32318`.

Huang:1994:MMP

[HRR94] Weizhang Huang, Yuhe Ren, and Robert D. Russell. Moving mesh partial differential equations (MMPDEs) based on the equidistribution principle. *SIAM Journal on Numerical Analysis*, 31(3): 709–730, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hansen:1967:IAM

[HS67] Eldon Hansen and Roberta Smith. Interval arithmetic in matrix computations, Part II. *SIAM Journal on Numerical Analysis*, 4(1):1–9, March 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hall:1968:NBS

[HS68] C. A. Hall and J. Spanier. Nested bounds for the spectral radius. *SIAM Journal on Numerical Analysis*, 5(1): 113–125, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hundsdorfer:1987:AEI

[HS87] W. H. Hundsdorfer and M. N. Spijker. On the algebraic equations in implicit Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 24 (3):583–594, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Huang:1992:PMT

[HS92] Wei Zhang Huang and David M. Sloan. The pseudospectral method for third-order differential equations. *SIAM Journal on Numerical Analysis*, 29(6):1626–1647, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Humphries:1994:RKM

[HS94] A. R. Humphries and A. M. Stuart. Runge–Kutta methods for dissipative and gradient dynamical systems. *SIAM Journal on Numerical Analysis*, 31(5):1452–1485, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Han:1997:FMS

[HS97] Lu Han and Larry L. Schumaker. Fitting monotone surfaces to scattered data using C^1 piecewise cubics. *SIAM Journal on Numerical Analysis*, 34(2):569–585, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26858`.

Hyman:1999:ODT

[HS99] James M. Hyman and Mikhail Shashkov. The orthogonal decomposition theorems for mimetic finite difference methods. *SIAM Journal on Numerical Analysis*, 36(3):788–818, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31404`.

Huang:1982:BEM

[HT82] Mingyou Huang and Vidar Thomee. On the backward Euler method for parabolic equations with rough initial data. *SIAM Journal on Numerical Analysis*, 19(3):599–603, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Teng:1997:ORC

[hTZ97] Zhen huan Teng and Pingwen Zhang. Optimal L^1-rate of convergence for the viscosity method and monotone scheme to piecewise constant solutions with shocks. *SIAM Journal on Numerical Analysis*, 34(3):959–978, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26886`.

Hu:1996:SDP

[Hu96] Qiya Hu. Stieltjes derivatives and β-polynomial spline collocation for Volterra integrodifferential equations with singularities. *SIAM Journal on Numerical Analysis*, 33(1):

208–220, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hu:1997:SNS

[Hu97] Qi Ya Hu. Superconvergence of numerical solutions to Volterra integral equations with singularities. *SIAM Journal on Numerical Analysis*, 34(5): 1698–1707, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26683`.

Huang:1975:JTM

[Hua75] C. P. Huang. A Jacobi-type method for triangularizing an arbitrary matrix. *SIAM Journal on Numerical Analysis*, 12 (4):566–570, September 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hubbard:1965:ADS

[Hub65] Bert E. Hubbard. Alternating direction schemes for the heat equation in a general domain. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(3):448–463, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Huddleston:1968:MPM

[Hud68] Robert E. Huddleston. Maximum principle methods for the discretization error in the approximation of the Bergman harmonic kernel by finite difference methods. *SIAM Journal on Numerical Analysis*, 5(3):613–625, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Huelsman:1973:QFF

[Hue73] Charles B. Huelsman, III. Quadrature formulas over fully symmetric planar regions. *SIAM Journal on Numerical Analysis*, 10(3): 539–552, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hughett:1998:EBN

[Hug98] Paul Hughett. Error bounds for numerical inversion of a probability characteristic function. *SIAM Journal on Numerical Analysis*, 35 (4):1368–1392, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31085`.

Hurt:1967:SST

[Hur67] James Hurt. Some stability theorems for ordinary difference equations. *SIAM Journal on Numerical Analysis*, 4

(4):582–596, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Huynh:1993:AMC

[Huy93] Hung T. Huynh. Accurate monotone cubic interpolation. *SIAM Journal on Numerical Analysis*, 30(1):57–100, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Huynh:1995:AUM

[Huy95] H. T. Huynh. Accurate upwind methods for the Euler equations. *SIAM Journal on Numerical Analysis*, 32 (5):1565–1619, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hoffman:1970:PDG

[HV70] Alan J. Hoffman and Richard S. Varga. Patterns of dependence in generalizations of Gerschgorin's theorem. *SIAM Journal on Numerical Analysis*, 7(4):571–574, December 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Havlak:1996:NAR

[HV96] Karl J. Havlak and Harold Dean Victory, Jr. The numerical analysis of random particle methods applied to Vlasov–Poisson–Fokker–Planck kinetic equations. *SIAM Journal on Numerical Analysis*, 33 (1):291–317, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Holst:1997:SMS

[HV97] Michael Holst and Stefan Vandewalle. Schwarz methods: To symmetrize or not to symmetrize. *SIAM Journal on Numerical Analysis*, 34(2):699–722, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27574`.

Havlak:1998:DPM

[HV98] Karl J. Havlak and Harold Dean Victory, Jr. On deterministic particle methods for solving Vlasov–Poisson–Fokker–Planck systems. *SIAM Journal on Numerical Analysis*, 35 (4):1473–1519, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30252`.

Houstis:1988:CCS

[HVR88] E. N. Houstis, E. A. Vavalis, and J. R. Rice. Convergence of $O(h^4)$ cubic spline collocation methods for elliptic partial differential equations. *SIAM Journal on Numerical Analysis*, 25(1):54–74, February 1988. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Hairer:1981:ASI

[HW81] E. Hairer and G. Wanner. Algebraically stable and implementable Runge–Kutta methods of high order. *SIAM Journal on Numerical Analysis*, 18(6):1098–1108, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hairer:1983:IBF

[HW83] E. Hairer and G. Wanner. On the instability of the BDF formulas. *SIAM Journal on Numerical Analysis*, 20(6):1206–1209, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hou:1992:CFD

[HW92] Thomas Y. Hou and Brian T. R. Wetton. Convergence of a finite difference scheme for the Navier–Stokes equations using vorticity boundary conditions. *SIAM Journal on Numerical Analysis*, 29 (3):615–639, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hou:1993:SOC

[HW93] Thomas Y. Hou and Brian T. R. Wetton. Second-order convergence of a projection scheme for the incompressible Navier–Stokes equations with boundaries. *SIAM Journal on Numerical Analysis*, 30(3): 609–629, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hairer:1997:OCG

[HW97a] Ernst Hairer and Gerhard Wanner. Order conditions for general two-step Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 34(6):2087–2089, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29814`.

Hoppe:1997:AMT

[HW97b] Ronald H. W. Hoppe and Barbara Wohlmuth. Adaptive multilevel techniques for mixed finite element discretizations of elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 34(4):1658–1681, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27699`.

Han:1998:NMF

[HW98] Houde Han and Xiaonan Wu. A new mixed finite element formulation and the MAC method for the Stokes equations. *SIAM Jour-*

nal on Numerical Analysis, 35(2):560–571, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/30038.

Hu:1995:DMS

[HY95] Yingkang Hu and Xiang Ming Yu. Discrete modulus of smoothness of splines with equally spaced knots. *SIAM Journal on Numerical Analysis*, 32(5):1428–1435, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hu:1996:DCA

[HY96] Yingkang Hu and Xiang Ming Yu. The degree of copositive approximation and a computer algorithm. *SIAM Journal on Numerical Analysis*, 33 (1):388–398, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Harten:1994:FMA

[HYS94] Ami Harten and Itai Yad-Shalom. Fast multiresolution algorithms for matrix-vector multiplication. *SIAM Journal on Numerical Analysis*, 31(4): 1191–1218, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hettich:1990:AGR

[HZ90] R. Hettich and P. Zencke. An algorithm for general restricted rational Chebyshev approximation. *SIAM Journal on Numerical Analysis*, 27 (4):1024–1033, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Hsiao:1994:OOM

[HZ94] George C. Hsiao and Shangyou Zhang. Optimal order multigrid methods for solving exterior boundary value problems. *SIAM Journal on Numerical Analysis*, 31(3):680–694, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ihlenburg:1997:FES

[IB97] Frank Ihlenburg and Ivo Babuška. Finite element solution of the Helmholtz equation with high wave number Part II: The *h-p* version of the FEM. *SIAM Journal on Numerical Analysis*, 34 (1):315–358, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27233.

Isaacson:1982:NAS

[IIMPL82] D. Isaacson, E. L. Isaacson, D. Marchesin, and P. J. Paes-Leme. Numerical analysis of the spectral properties of coupled oscillator Schrödinger operators. II. two-coupled anharmonic oscillators. *SIAM Journal on Numerical Analysis*, 19(1):126–141, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ito:1993:DPM

[IK93] Kazufumi Ito and Sungkwon Kang. A dissipative pseudospectral method for the two-dimensional Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 30 (5):1333–1350, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ito:1991:FDA

[IKP91] K. Ito, F. Kappel, and G. Peichl. A fully discretized approximation scheme for size-structured population models. *SIAM Journal on Numerical Analysis*, 28(4):923–954, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Iannelli:1996:NAM

[ILM+96] Mimmo Iannelli, Roberto Loro, Fabio A. Milner, Andrea Pugliese, and Guglielmo Rabbiolo. Numerical analysis of a model for the spread of HIV/AIDS. *SIAM Journal on Numerical Analysis*, 33 (3):864–882, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ikebe:1969:NSI

[ILT69] Yasuhiko Ikebe, M. Stuart Lynn, and William P. Timlake. The numerical solution of the integral equation formulation of the single interface Neumann problem. *SIAM Journal on Numerical Analysis*, 6(3):334–346, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

intHout:1996:NUM

[in 96] K. J. in 't Hout. A note on unconditional maximum norm contractivity of diagonally split Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 33(3): 1125–1134, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ioakimidis:1981:WGM

[Ioa81] N. I. Ioakimidis. On the weighted Galerkin method of numerical solution of Cauchy type singular integral equations. *SIAM Journal on Numerical Analysis*, 18(6):1120–1127, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ip:1987:LCS

[Ip87] Chi Ming Ip. On least-change secant updates in factored form. *SIAM Journal on Numerical Analysis*, 24(5):1126–1132, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Iserles:1991:UAS

[IPS91] A. Iserles, A. T. Peplow, and A. M. Stuart. A unified approach to spurious solutions introduced by time discretisation. Part I: Basic theory. *SIAM Journal on Numerical Analysis*, 28(6):1723–1751, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Incerti:1979:NMS

[IPZ79] Sandro Incerti, Valerio Parisi, and Francesco Zirilli. A new method for solving nonlinear simultaneous equations. *SIAM Journal on Numerical Analysis*, 16(5):779–789, October 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ivanauskas:1999:CSE

[IR99] F. Ivanauskas and M. Radziunas. On convergence and stability of the explicit difference method for solution of nonlinear Schrödinger equations. *SIAM Journal on Numerical Analysis*, 36(5):1466–1481, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31972`.

Irvine:1990:ESN

[IS90] Douglas H. Irvine and Michael A. Savageau. Efficient solution of nonlinear ordinary differential equations expressed in S-System canonical form. *SIAM Journal on Numerical Analysis*, 27(3):704–735, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Isaacson:1986:D

[Isa86] Eugene Isaacson. Dedication. *SIAM Journal on Numerical Analysis*, 23(5):i, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Iserles:1979:GPA

[Ise79] Arieh Iserles. On the generalized Padé approximations to the exponential function. *SIAM Journal on Numerical Analysis*, 16(4):631–636, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Iserles:1981:MEA

[Ise81a] Arieh Iserles. On multivalued exponential approximations. *SIAM Journal on Numerical*

Analysis, 18(3):480–499, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Iserles:1981:RIA

[Ise81b] Arieh Iserles. Rational interpolation to $\exp(-x)$ with application to certain stiff systems. *SIAM Journal on Numerical Analysis*, 18(1):1–12, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). In SIGNUM Meeting on Numerical Ordinary Differential Equations.

Iserles:1984:CMN

[Ise84] Arieh Iserles. Composite methods for numerical solution of stiff systems of ODEs. *SIAM Journal on Numerical Analysis*, 21(2): 340–351, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Issautier:1996:CWP

[Iss96] D. Issautier. Convergence of a weighted particle method for solving the Boltzmann (B.G.K.) equation. *SIAM Journal on Numerical Analysis*, 33(6): 2099–2119, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26685`.

Ioakimidis:1980:CBD

[IT80] N. I. Ioakimidis and P. S. Theocaris. A comparison between the direct and the classical numerical methods for the solution of Cauchy type singular integral equations. *SIAM Journal on Numerical Analysis*, 17(1):115–118, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

IP:1988:OCC

[IT88] Chi Ming Ip and Michael J. Todd. Optimal conditioning and convergence in rank one quasi-Newton updates. *SIAM Journal on Numerical Analysis*, 25(1):206–221, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ito:1991:NMC

[IT91] Kazufumi Ito and Janos Turi. Numerical methods for a class of singular integro-differential equations based on semigroup approximation. *SIAM Journal on Numerical Analysis*, 28(6):1698–1722, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Istace:1995:TFZ

[IT95] M.-P. Istace and J.-P. Thiran. On the third and fourth Zolotarev problems in the complex plane. *SIAM Journal*

on *Numerical Analysis*, 32(1): 249–259, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ito:1991:FDS

[ITM91] K. Ito, H. T. Tran, and A. Manitius. A fully-discrete spectral method for delay-differential equations. *SIAM Journal on Numerical Analysis*, 28(4):1121–1140, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Isaacson:1981:MWR

[IZ81] Eugene Isaacson and Gideon Zwas. Mountain winds revisited. *SIAM Journal on Numerical Analysis*, 18(2): 277–288, April 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Johnson:1983:QNM

[JA83] George W. Johnson and Nieves H. Austria. A quasi-Newton method employing direct secant updates of matrix factorizations. *SIAM Journal on Numerical Analysis*, 20(2):315–325, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jackson:1975:IAE

[Jac75] L. W. Jackson. Interval arithmetic error-bounding algorithms. *SIAM Journal on Numerical Analysis*, 12(2): 223–238, April 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jackiewicz:1981:NSV

[Jac81] Zdzisław Jackiewicz. The numerical solution of Volterra functional differential equations of neutral type. *SIAM Journal on Numerical Analysis*, 18(4):615–626, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jackiewicz:1984:OSM

[Jac84] Zdzisław Jackiewicz. One-step methods of any order for neutral functional differential equations. *SIAM Journal on Numerical Analysis*, 21 (3):486–511, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jackiewicz:1986:QMM

[Jac86] Zdzisław Jackiewicz. Quasilinear multistep methods and variable step predictor-corrector methods for neutral functional differential equations. *SIAM Journal on Numerical Analysis*, 23(2): 423–452, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jackson:1988:CIA

[Jac88] Kenneth R. Jackson. The convergence of integrand-approximation formulas for the numerical solution of IVPs for ODEs. *SIAM Journal on Numerical Analysis*, 25 (1):163–188, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jaffard:1992:WMF

[Jaf92] Stéphane Jaffard. Wavelet methods for fast resolution of elliptic problems. *SIAM Journal on Numerical Analysis*, 29(4):965–986, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

James:1968:NSS

[Jam68] Ralph L. James. The numerical solution of singular Volterra integral equations. *SIAM Journal on Numerical Analysis*, 5(2):352–362, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jamet:1969:NSD

[Jam69] Pierre Jamet. Numerical solution of the Dirichlet problem for elliptic parabolic equations. *SIAM Journal on Numerical Analysis*, 6(3):458–466, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jamet:1971:FDS

[Jam71] Pierre Jamet. A finite difference scheme and an existence theorem for a nonlinear hyperbolic system of differential equations. *SIAM Journal on Numerical Analysis*, 8 (3):524–535, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

James:1973:CMI

[Jam73] K. R. James. Convergence of matrix iterations subject to diagonal dominance. *SIAM Journal on Numerical Analysis*, 10(3):478–484, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jamet:1977:EIE

[Jam77] Pierre Jamet. Estimation of the interpolation error for quadrilateral finite elements which can degenerate into triangles. *SIAM Journal on Numerical Analysis*, 14(5):925–930, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jamet:1978:GTA

[Jam78] Pierre Jamet. Galerkin-type approximations which are discontinuous in time for parabolic equations in a variable domain. *SIAM Journal on Numerical Analysis*, 15(5): 912–928, October 1978. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jamet:1980:SCG

[Jam80] Pierre Jamet. Stability and convergence of a generalized Crank–Nicolson scheme on a variable mesh for the heat equation. *SIAM Journal on Numerical Analysis*, 17(4): 530–539, August 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jankowska:1979:TMS

[Jan79] Janina Jankowska. Theory of multivariate secant methods. *SIAM Journal on Numerical Analysis*, 16(4):547–562, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Janssen:1983:GBS

[Jan83] Rainer Janssen. A generalization of Buchanan's stability criterion. *SIAM Journal on Numerical Analysis*, 20(2): 234–238, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Janovska:1994:NTS

[Jan94] Dáša Janovská. Numerical treatment of subspace-breaking Takens–Bogdanov points with nonlinear degeneracies. *SIAM Journal on Numerical Analysis*, 31(5):1415–1433, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jay:1996:SPR

[Jay96] Laurent Jay. Symplectic partitioned Runge–Kutta methods for constrained Hamiltonian systems. *SIAM Journal on Numerical Analysis*, 33(1): 368–387, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jensen:1988:DRN

[JB88] Søren Jensen and Ivo Babuška. Dimensional reduction for nonlinear boundary value problems. *SIAM Journal on Numerical Analysis*, 25(3): 644–669, June 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jepson:1986:CCN

[JD86] A. D. Jepson and D. W. Decker. Convergence cones near bifurcation. *SIAM Journal on Numerical Analysis*, 23(5):959–975, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Joe:1993:IRL

[JD93] S. Joe and S. A. R. Disney. Intermediate rank lattice rules for multidimensional integration. *SIAM Journal on Numerical Analysis*, 30(2):

569–582, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jefferson:1969:TEE

[Jef69] Thomas H. Jefferson. Truncation error estimates for T-fractions. *SIAM Journal on Numerical Analysis*, 6 (3):359–364, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jackson:1978:TCC

[JEH78] K. R. Jackson, W. H. Enright, and T. E. Hull. A theoretical criterion for comparing Runge–Kutta formulas. *SIAM Journal on Numerical Analysis*, 15(3):618–641, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jeltsch:1976:SSR

[Jel76] Rolf Jeltsch. Stiff stability and its relation to A_0-and $A(0)$-stability. *SIAM Journal on Numerical Analysis*, 13 (1):8–17, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jeltsch:1977:SSM

[Jel77] R. Jeltsch. Stiff stability of multistep multiderivative methods. *SIAM Journal on Numerical Analysis*, 14 (4):760–772, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See corrigendum [Jel79].

Jeltsch:1979:CSS

[Jel79] Rolf Jeltsch. Corrigendum: "Stiff Stability of Multistep Multiderivative Methods" [SIAM J. Numer. Anal. **14** (1977), no. 4, 760–772, MR **57** #11058]. *SIAM Journal on Numerical Analysis*, 16 (2):339–345, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [Jel77].

Jennings:1970:DFR

[Jen70] Gray Jennings. Digital filtering of random digits. *SIAM Journal on Numerical Analysis*, 7(2):238–247, June 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jensen:1972:SLS

[Jen72] Paul S. Jensen. The solution of large symmetric eigenproblems by sectioning. *SIAM Journal on Numerical Analysis*, 9(4):534–545, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jensen:1976:SSM

[Jen76] Paul S. Jensen. Stiffly stable methods for undamped second order equations of motion. *SIAM Journal on Numerical Analysis*, 13(4):549–563, September 1976. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jensen:1992:ADR

[Jen92] Søren Jensen. Adaptive dimensional reduction numerical solution of monotone quasilinear boundary value problems. *SIAM Journal on Numerical Analysis*, 29 (5):1294–1320, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jeon:1994:IBI

[Jeo94] Youngmok Jeon. An indirect boundary integral equation method for the biharmonic equation. *SIAM Journal on Numerical Analysis*, 31 (2):461–476, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jerome:1973:MPLa

[Jer73a] Joseph W. Jerome. Minimization problems and linear and nonlinear spline functions. I: Existence. *SIAM Journal on Numerical Analysis*, 10(5): 808–819, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jerome:1973:MPLb

[Jer73b] Joseph W. Jerome. Minimization problems and linear and nonlinear spline functions. II: Convergence. *SIAM Journal on Numerical Analysis*, 10(5): 820–830, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jerome:1980:CSI

[Jer80] Joseph W. Jerome. Convergence of successive iterative semidiscretizations for FitzHugh–Nagumo reaction diffusion systems. *SIAM Journal on Numerical Analysis*, 17(2):192–206, April 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jerome:1984:FDS

[Jer84] Joseph W. Jerome. Fully discrete stability and invariant rectangular regions for reaction-diffusion systems. *SIAM Journal on Numerical Analysis*, 21(6):1054–1065, December 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jerome:1988:CDN

[Jer88] Joseph W. Jerome. Convection-dominated nonlinear systems: analysis of the douglas-russell transport-diffusion algorithm based on approximate characteristics and invariant regions. *SIAM Journal on Numerical Analysis*, 25(4): 815–836, August 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jespersen:1978:RGM

[Jes78] Dennis Jespersen. Ritz–Galerkin methods for singular boundary value problems. *SIAM Journal on Numerical Analysis*, 15(4):813–834, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jetter:1982:NCG

[Jet82] Kurt Jetter. A new class of Gaussian quadrature formulas based on Birkhoff type data. *SIAM Journal on Numerical Analysis*, 19(5):1081–1089, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jetter:1987:UGB

[Jet87] Kurt Jetter. Uniqueness of Gauss–Birkhoff quadrature formulas. *SIAM Journal on Numerical Analysis*, 24(1):147–154, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jia:1986:SIB

[Jia86] Rong Qing Jia. Spline interpolation at a bi-infinite knot sequence. *SIAM Journal on Numerical Analysis*, 23(3):653–662, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jimack:1996:BAP

[Jim96] P. K. Jimack. A best approximation property of the moving finite element method. *SIAM Journal on Numerical Analysis*, 33(6):2286–2302, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25543`.

Jones:1968:ICC

[JK68] R. C. Jones and L. A. Karlovitz. Iterative construction of constrained Chebyshev approximation of continuous functions. *SIAM Journal on Numerical Analysis*, 5(3):574–585, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jackson:1974:FOE

[JK74] L. W. Jackson and Surender Kumar Kenue. A fourth order exponentially fitted method. *SIAM Journal on Numerical Analysis*, 11(5):965–978, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jerome:1991:FEA

[JK91] Joseph W. Jerome and Thomas Kerkhoven. A finite element approximation theory for the drift diffusion semiconductor model. *SIAM*

Journal on Numerical Analysis, 28(2):403–422, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jaimoukha:1994:KSM

[JK94] Imad M. Jaimoukha and Ebrahim M. Kasenally. Krylov subspace methods for solving large Lyapunov equations. *SIAM Journal on Numerical Analysis*, 31(1):227–251, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jackiewicz:1996:CWR

[JK96] Z. Jackiewicz and M. Kwapisz. Convergence of waveform relaxation methods for differential-algebraic systems. *SIAM Journal on Numerical Analysis*, 33(6):2303–2317, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23309`.

Jiang:1998:HRN

[JLL+98] G.-S. Jiang, D. Levy, C.-T. Lin, S. Osher, and E. Tadmor. High-resolution nonoscillatory central schemes with nonstaggered grids for hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 35(6):2147–2168, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31756`.

Johnson:1983:PPC

[JMP83] Olin G. Johnson, Charles A. Micchelli, and George Paul. Polynomial preconditioners for conjugate gradient calculations. *SIAM Journal on Numerical Analysis*, 20(2): 362–376, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jeltsch:1983:SSH

[JN83] Rolf Jeltsch and Olavi Nevanlinna. Stability of semidiscretizations of hyperbolic problems. *SIAM Journal on Numerical Analysis*, 20(6): 1210–1218, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jackson:1995:PPR

[JN95] K. R. Jackson and S. P. Nørsett. The potential for parallelism in Runge–Kutta methods. part 1: RK formulas in standard form. *SIAM Journal on Numerical Analysis*, 32(1):49–82, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jiang:1998:FEM

[JN98] Xun Jiang and Ricardo H. Nochetto. A P^1-P^1 finite element method for a phase relaxation model I: Quasi-uniform mesh. *SIAM Journal on Numerical Analysis*, 35(3):1176–1190, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29778`.

Johnson:1990:PEE

[JNT90] Claes Johnson, Yi-Yong Nie, and Vidar Thomée. An A posteriori error estimate and adaptive timestep control for a backward Euler discretization of a parabolic problem. *SIAM Journal on Numerical Analysis*, 27(2): 277–291, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jiang:1999:FEM

[JNV99] Xun Jiang, Ricardo H. Nochetto, and Claudio Verdi. A P^1–P^1 finite element method for a phase relaxation model II: Adaptively refined meshes. *SIAM Journal on Numerical Analysis*, 36(3):974–999, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31759`.

Joe:1985:DCM

[Joe85] S. Joe. Discrete collocation methods for second kind Fredholm integral equations. *SIAM Journal on Numerical Analysis*, 22(6):1167–1177, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Joe:1999:ADN

[Joe99] Stephen Joe. An average L_2 discrepancy for number-theoretic rules. *SIAM Journal on Numerical Analysis*, 36(6): 1949–1961, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33760`.

Johnson:1969:EBS

[Joh69] Olin G. Johnson. Error bounds for Sturm–Liouville eigenvalue approximations by several piecewise cubic Rayleigh–Ritz methods. *SIAM Journal on Numerical Analysis*, 6(3):317–333, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Johnson:1975:NRR

[Joh75] Darell J. Johnson. On the nontriviality of restricted range polynomial approximation. *SIAM Journal on Numerical Analysis*, 12(2): 183–187, April 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Johnson:1976:CEA

[Joh76] Claes Johnson. A convergence estimate for an approximation of a parabolic variational inequality. *SIAM Journal on Numerical Analysis*, 13 (4):599–606, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Johnson:1977:MFE

[Joh77] C. Johnson. A mixed finite element method for plasticity problems with hardening. *SIAM Journal on Numerical Analysis*, 14(4):575–583, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Johnson:1978:NDF

[Joh78] Charles R. Johnson. Numerical determination of the field of values of a general complex matrix. *SIAM Journal on Numerical Analysis*, 15(3): 595–602, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Johnson:1988:EEA

[Joh88] Claes Johnson. Error estimates and adaptive time-step control for a class of one-step methods for stiff ordinary differential equations. *SIAM Journal on Numerical Analysis*, 25(4):908–926, August 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jokinen:1996:MSI

[Jok96] Olli Jokinen. On monotone solutions of an integrodifferential equation in linear viscoelasticity. *SIAM Journal on Numerical Analysis*, 33 (4):1410–1424, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25126`.

Jamet:1967:NME

[JP67] Pierre Jamet and Seymour V. Parter. Numerical methods for elliptic differential equations whose coefficients are singular on a portion of the boundary. *SIAM Journal on Numerical Analysis*, 4(2): 131–146, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Johnson:1983:CFD

[JP83] Claes Johnson and Juhani Pitkäranta. Convergence of a fully discrete scheme for two-dimensional neutron transport. *SIAM Journal on Numerical Analysis*, 20(5):951–966, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Janovsky:1992:CAA

[JP92] Vladimír Janovský and Petr Plecháč. Computer-aided analysis of imperfect bifurcation diagrams. I. simple bifurcation point and isola formation centre. *SIAM Journal on Numerical Analysis*, 29 (2):498–512, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Janovsky:1996:LNA

[JP96] Vladimír Janovský and Petr Plecháč. Local numerical analysis of Hopf bifurcation. *SIAM Journal on Numerical Analysis*, 33(3): 1150–1168, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jin:1998:USA

[JP98] HongSung Jin and Steven Pruess. Uniformly superconvergent approximations for linear two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 35 (1):363–375, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29720`.

Joly:1996:NNF

[JPRT96] P. Joly, C. Poirier, J. E. Roberts, and P. Trouve. A new nonconforming finite element method for the computation of electromagnetic guided waves I: Mathematical analysis. *SIAM Journal on Numerical Analysis*, 33 (4):1494–1525, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25681`.

Jin:1998:DRS

[JPT98] Shi Jin, Lorenzo Pareschi, and Giuseppe Toscani. Diffusive relaxation schemes for multiscale discrete-velocity kinetic equations. *SIAM Journal on Numerical Analysis*, 35(6):2405–2439, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31596`.

James:1975:CCS

[JR75] K. R. James and W. Riha. Convergence criteria for successive overrelaxation. *SIAM Journal on Numerical Analysis*, 12(2):137–143, April 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Johnson:1995:NHS

[JRB95] Claes Johnson, Rolf Rannacher, and Mats Boman. Numerics and hydrodynamic stability: Toward error control in computational fluid dynamics. *SIAM Journal on Numerical Analysis*, 32(4):1058–1079, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jackiewicz:1991:TSR

[JRF91] Z. Jackiewicz, R. Renaut, and A. Feldstein. Two-step Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 28(4):1165–1182, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jerome:1968:NON

[JS68a] J. W. Jerome and L. L. Schumaker. A note on obtaining natural spline functions by the abstract approach of atteia and laurent. *SIAM Journal on Numerical Analysis*, 5(4):657–663, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Johnson:1968:SM

[JS68b] L. W. Johnson and D. R. Scholz. On Steffensen's method. *SIAM Journal on Numerical Analysis*, 5(2): 296–302, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jones:1969:TEB

[JS69] William B. Jones and R. I. Snell. Truncation error bounds for continued fractions. *SIAM Journal on Numerical Analysis*, 6(2): 210–221, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jain:1983:KAS

[JS83] Narendra K. Jain and Kishore Singhal. On Kublanovskaya's approach to the solution of the generalized latent value problem for functional λ-matrices. *SIAM Journal on Numerical Analysis*, 20 (5):1062–1070, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jepson:1985:FST

[JS85a] A. Jepson and A. Spence. Folds in solutions of two parameter systems and their calculation. Part I. *SIAM Journal on Numerical Analysis*, 22 (2):347–368, April 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jepson:1985:NSN

[JS85b] Allan D. Jepson and Alastair Spence. The numerical solution of nonlinear equations having several parameters. I. scalar equations. *SIAM Journal on Numerical Analysis*, 22(4):736–759, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jeltsch:1987:ABT

[JS87] Rolf Jeltsch and J. H. Smit. Accuracy barriers of two time level difference schemes for hyperbolic equations. *SIAM Journal on Numerical Analysis*, 24(1):1–11, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Johnson:1989:AQE

[JS89] Claes G. L. Johnson and L. Ridgway Scott. An analysis of quadrature errors in second-kind boundary integral methods. *SIAM Journal on Numerical Analysis*, 26(6):1356–1382, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Joe:1992:ILR

[JS92] Stephen Joe and Ian H. Sloan. Imbedded lattice rules for multidimensional integration. *SIAM Journal on Numerical Analysis*, 29(4):1119–1135, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Janovsky:1996:QAN

[JS96] Vladimír Janovský and Viktor Seige. Qualitative analysis of Newton's flow. *SIAM Journal on Numerical Analysis*, 33(5):2068–2097, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24185`.

Jianguo:1998:FVE

[JS98] Huang Jianguo and Xi Shitong. On the finite volume element method for general self-adjoint elliptic problems. *SIAM Journal on Numerical Analysis*, 35(5):1762–1774, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26469`.

Jepson:1991:NSN

[JSC91] A. D. Jepson, A. Spence, and K. A. Cliffe. The numerical solution of nonlinear equations having several parameters. Part III. equations with Z_2-symmetry. *SIAM Journal on Numerical Analysis*, 28(3):809–832, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jenkins:1970:TSA

[JT70] M. A. Jenkins and J. F. Traub. A three-stage algorithm for real polynomials using quadratic iteration. *SIAM Journal on Numerical Analysis*, 7(4):545–566, December 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jones:1971:PBT

[JT71] William B. Jones and W. J. Thron. *A Posteriori* bounds for the truncation error of continued fractions. *SIAM Journal on Numerical Analysis*, 8(4):693–705, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jackiewicz:1995:GCT

[JT95] Z. Jackiewicz and S. Tracogna. A general class of two-step Runge–Kutta methods for ordinary differential equations. *SIAM Journal on Numerical Analysis*, 32(5):1390–1427, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Joly:1997:NTA

[JT97] Patrick Joly and Jukka Tuomela. A new theoretical approach to absorbing layers. *SIAM Journal on Numerical Analysis*, 34(2):671–698, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26174`.

Jones:1983:TEB

[JTW83] William B. Jones, W. J. Thron, and Haakon Waadeland. Truncation error bounds for continued fractions $K(a_n/1)$ with parabolic element regions. *SIAM Journal on Numerical Analysis*, 20(6):1219–1230, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jupp:1978:ADS

[Jup78] David L. B. Jupp. Approximation to data by splines with free knots. *SIAM Journal on Numerical Analysis*, 15(2):328–343, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Janssen:1996:MWR

[JV96] Jan Janssen and Stefan Vandewalle. Multigrid waveform relaxation on spatial finite element meshes: The continuous-time case. *SIAM Journal on Numerical Analysis*, 33(2):456–474, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Janssen:1997:SWR

[JV97] Jan Janssen and Stefan Vandewalle. On SOR waveform relaxation methods. *SIAM Journal on Numerical Analysis*, 34(6):2456–2481, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29429`.

Jimack:1991:TDF

[JW91] P. K. Jimack and A. J. Wathen. Temporal derivatives in the finite-element method on continuously deforming grids. *SIAM Journal on Numerical Analysis*, 28(4): 990–1003, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Jin:1998:NPS

[JX98] Shi Jin and Zhouping Xin. Numerical passage from systems of conservation laws to Hamilton–Jacobi equations, and relaxation schemes. *SIAM Journal on Numerical Analysis*, 35(6):2385–2404, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31436`.

Jiang:1998:DSF

[JY98] Guang-Shan Jiang and Shih-Hsien Yu. Discrete shocks for finite difference approximations to scalar conservation laws. *SIAM Journal on Numerical Analysis*, 35(2):749–772, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30709`.

Kacur:1999:SSF

[Kac99] J. Kacur. Solution of some free boundary problems by relaxation schemes. *SIAM Journal on Numerical Analysis*, 36(1):290–316, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31114`.

Karakashian:1993:OOE

[KAD93] Ohannes Karakashian, Georgios D. Akrivis, and Vassilios A. Dougalis. On optimal order error estimates for the nonlinear Schrödinger equation. *SIAM Journal on Numerical Analysis*, 30(2): 377–400, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kahan:1967:LMC

[Kah67] W. Kahan. Laguerre's method and a circle which contains at least one zero of a polynomial. *SIAM Journal on Numerical Analysis*, 4 (3):474–482, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kahaner:1969:EAE

[Kah69] David K. Kahaner. On equal and almost equal weight quadrature formulas. *SIAM Journal on Numerical Analysis*, 6(4):551–556, December

1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kammler:1969:EBC

[Kam69] David W. Kammler. An error bound for capacitance calculations. *SIAM Journal on Numerical Analysis*, 6(2): 254–257, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kammler:1976:CAC

[Kam76] David W. Kammler. Chebyshev approximation of completely monotonic functions by sums of exponentials. *SIAM Journal on Numerical Analysis*, 13(5):761–774, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kammler:1978:NEW

[Kam78] David W. Kammler. Numerical evaluation of $\exp(tA)$ when A is a companion matrix. *SIAM Journal on Numerical Analysis*, 15(6):1077–1102, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kammler:1979:ACM

[Kam79a] David W. Kammler. L_1-approximation of completely monotonic functions by sums of exponentials. *SIAM Journal on Numerical Analysis*, 16(1):30–45, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kammler:1979:LSA

[Kam79b] David W. Kammler. Least squares approximation of completely monotonic functions by sums of exponentials. *SIAM Journal on Numerical Analysis*, 16(5):801–818, October 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kammler:1981:DAC

[Kam81] David W. Kammler. Differential approximation of completely monotonic functions. *SIAM Journal on Numerical Analysis*, 18(5):900–918, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Karon:1978:CIC

[Kar78] John M. Karon. Computing improved Chebyshev approximations by the continuation method. I. description of an algorithm. *SIAM Journal on Numerical Analysis*, 15(6): 1269–1288, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Karakashian:1982:GLM

[Kar82] Ohannes A. Karakashian. On a Galerkin–Lagrange multiplier method for the stationary Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 19(5):909–923, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Karni:1992:VSP

[Kar92] S. Karni. Viscous shock profiles and primitive formulations. *SIAM Journal on Numerical Analysis*, 29(6):1592–1609, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Karni:1996:FFF

[Kar96] Smadar Karni. Far-field filtering operators for suppression of reflections from artificial boundaries. *SIAM Journal on Numerical Analysis*, 33(3):1014–1047, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Katsanis:1969:NST

[Kat69] Theodore Katsanis. Numerical solution of Tricomi equation using theory of symmetric positive differential equations. *SIAM Journal on Numerical Analysis*, 6(2):236–253, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kaufman:1974:ASG

[Kau74] Linda Kaufman. The *LZ*-algorithm to solve the generalized eigenvalue problem. *SIAM Journal on Numerical Analysis*, 11(5):997–1024, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kaufman:1986:BDC

[Kau86] Edwin H. Kaufman, Jr. The behavior of differential correction in difficult situations. *SIAM Journal on Numerical Analysis*, 23(2):453–460, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Katz:1974:ACN

[KC74] I. Norman Katz and Leon Cooper. An always-convergent numerical scheme for a random locational equilibrium problem. *SIAM Journal on Numerical Analysis*, 11(4):683–692, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kwon:1993:SOA

[KC93] Yonghoon Kwon and Chung-Ki Cho. Second-order accurate difference methods for a one-sex model of population dynamics. *SIAM Journal on Numerical Analysis*, 30(5):1385–1399, October 1993.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kaniel:1979:MNM

[KD79] Shmuel Kaniel and Achiya Dax. A modified Newton's method for unconstrained minimization. *SIAM Journal on Numerical Analysis*, 16 (2):324–331, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keast:1983:FSI

[KD83] Patrick Keast and Julio C. Díaz. Fully symmetric integration formulas for the surface of the sphere in S dimensions. *SIAM Journal on Numerical Analysis*, 20(2): 406–419, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keast:1973:OPM

[Kea73] P. Keast. Optimal parameters for multidimensional integration. *SIAM Journal on Numerical Analysis*, 10(5):831–838, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kearfott:1990:PIG

[Kea90] R. Baker Kearfott. Preconditioners for the interval Gauss–Seidel method. *SIAM Journal on Numerical Analysis*, 27 (3):804–822, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kedem:1981:PEB

[Ked81] Gershon Kedem. A posteriori error bounds for two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 18(3): 431–448, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keeping:1970:BMA

[Kee70] A. J. Keeping. Band matrices arising from finite difference approximations to a third order partial differential equation. *SIAM Journal on Numerical Analysis*, 7(1): 142–156, March 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keeping:1971:CAT

[Kee71] A. J. Keeping. On certain almost-triangular band matrices. *SIAM Journal on Numerical Analysis*, 8(2): 288–303, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keener:1986:SSS

[Kee86] James P. Keener. The sarkovskiĭ sequence and stable periodic orbits of maps of the interval. *SIAM Journal* on Numerical Analysis, 23(5): 976–985, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). Dedicated to Professor Herbert B. Keller on the occasion of his 60th birthday.

Keeling:1990:GRK

[Kee90a] Stephen L. Keeling. Galerkin/ Runge–Kutta discretizations for semilinear parabolic equations. *SIAM Journal on Numerical Analysis*, 27(2): 394–418, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keeling:1990:LCN

[Kee90b] Stephen L. Keeling. On Lipschitz continuity of nonlinear differential operators. *SIAM Journal on Numerical Analysis*, 27(2):385–393, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keenan:1995:TSP

[Kee95] Philip T. Keenan. Thermal simulation of pipeline flow. *SIAM Journal on Numerical Analysis*, 32(4):1225–1262, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keller:1965:SSS

[Kel65] Herbert B. Keller. On the solution of singular and semidefinite linear systems by iteration. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2):281–290, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Kellogg:1966:EEE

[Kel66] R. B. Kellogg. An error estimate for elliptic difference equations on a convex polygon. *SIAM Journal on Numerical Analysis*, 3 (1):79–90, March 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keller:1969:ADM

[Kel69] Herbert B. Keller. Accurate difference methods for linear ordinary differential systems subject to linear constraints. *SIAM Journal on Numerical Analysis*, 6(1):8–30, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keller:1974:ADM

[Kel74] Herbert B. Keller. Accurate difference methods for nonlinear two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 11 (2):305–320, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keller:1981:GIN

[Kel81] Herbert B. Keller. Geometrically isolated nonisolated solutions and their approximation. *SIAM Journal on Numerical Analysis*, 18(5):822–838, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kelley:1995:FMA

[Kel95] C. T. Kelley. A fast multilevel algorithm for integral equations. *SIAM Journal on Numerical Analysis*, 32(2): 501–513, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kemper:1975:SFA

[Kem75] Gene A. Kemper. Spline function approximation for solutions of functional differential equations. *SIAM Journal on Numerical Analysis*, 12 (1):73–88, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kershaw:1971:NCI

[Ker71] D. Kershaw. A note on the convergence of interpolatory cubic splines. *SIAM Journal on Numerical Analysis*, 8 (1):67–74, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kerkhoven:1986:PCG

[Ker86] Thomas Kerkhoven. A proof of convergence of Gummel's algorithm for realistic device geometries. *SIAM Journal on Numerical Analysis*, 23(6): 1121–1137, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kerkhoven:1988:SAD

[Ker88] Thomas Kerkhoven. A spectral analysis of the decoupling algorithm for semiconductor simulation. *SIAM Journal on Numerical Analysis*, 25(6): 1299–1312, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kerkhoven:1996:PLP

[Ker96] Thomas Kerkhoven. Piecewise linear Petrov–Galerkin error estimates for the box method. *SIAM Journal on Numerical Analysis*, 33(5): 1864–1884, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24182`.

Keiper:1991:AGB

[KG91] J. B. Keiper and C. W. Gear. The analysis of generalized backwards difference formula methods applied to Hessenberg form differential-algebraic equations. *SIAM*

Journal on Numerical Analysis, 28(3):833–858, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kacur:1993:SND

[KHK93] J. Kačur, A. Handlovičová, and M. Kačurová. Solution of nonlinear diffusion problems by linear approximation schemes. *SIAM Journal on Numerical Analysis*, 30(6): 1703–1722, December 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Krishnamachari:1989:FEA

[KHR89] S. V. Krishnamachari, L. J. Hayes, and T. F. Russell. A finite element alternating-direction method combined with a modified method of characteristics for convection-diffusion problems. *SIAM Journal on Numerical Analysis*, 26(6):1462–1473, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kimchi:1976:CSP

[Kim76] E. Kimchi. Chebyshev spaces of polynomials. *SIAM Journal on Numerical Analysis*, 13 (1):44–50, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

King:1972:ASP

[Kin72] J. Thomas King. The approximate solution of parabolic initial boundary value problems by weighted least-squares methods. *SIAM Journal on Numerical Analysis*, 9 (2):215–229, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

King:1973:FFO

[Kin73] Richard F. King. A family of fourth order methods for nonlinear equations. *SIAM Journal on Numerical Analysis*, 10(5):876–879, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kincaid:1974:CSD

[Kin74] David R. Kincaid. On complex second-degree iterative methods. *SIAM Journal on Numerical Analysis*, 11(2): 211–218, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

King:1975:SPV

[Kin75] J. Thomas King. Semidiscrete perturbed variational methods for the numerical solution of parabolic boundary value problems. *SIAM Journal on Numerical Analysis*, 12 (1):59–72, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

King:1979:EMO

[Kin79] Richard F. King. An extrapolation method of order four for linear sequences. *SIAM Journal on Numerical Analysis*, 16(5):719–725, October 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kirmse:1993:BDD

[Kir93] Andreas Kirmse. Bending-dominated deformation of thin spherical shells: Analysis and finite-element approximation. *SIAM Journal on Numerical Analysis*, 30(4):1015–1040, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Karakashian:1998:NFE

[KJ98] Ohannes A. Karakashian and Wadi N. Jureidini. A nonconforming finite element method for the stationary Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 35(1):93–120, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29719`.

Kappel:1981:SAN

[KK81a] F. Kappel and K. Kunisch. Spline approximations for neutral functional-differential equations. *SIAM Journal on Numerical Analysis*, 18(6): 1058–1080, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kreiss:1981:NMS

[KK81b] Barbro Kreiss and Heinz-Otto Kreiss. Numerical methods for singular perturbation problems. *SIAM Journal on Numerical Analysis*, 18(2): 262–276, April 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kroller:1991:CRF

[KK91] M. Kroller and K. Kunisch. Convergence rates for the feedback operators arising in the linear quadratic regulator problem governed by parabolic equations. *SIAM Journal on Numerical Analysis*, 28(5):1350–1385, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ku:1993:PIM

[KK93] Ta-Kang Ku and C.-C. Jay Kuo. Preconditioned iterative methods for solving Toeplitz-Plus-Hankel systems. *SIAM Journal on Numerical Analysis*, 30(3):824–845, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kelley:1998:CAP

[KK98a] C. T. Kelley and David E. Keyes. Convergence analysis of pseudo-transient continuation. *SIAM Journal on Numerical Analysis*, 35(2):508–523, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30479`.

Kreiss:1998:SSS

[KK98b] Gunilla Kreiss and Heinz-Otto Kreiss. Stability of steady solutions of Burgers's equation. *SIAM Journal on Numerical Analysis*, 35(6): 2329–2349, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31600`.

Kreiss:1994:CSS

[KKP94] Gunilla Kreiss, Heinz-Otto Kreiss, and N. Anders Petersson. On the convergence to steady state of solutions of nonlinear hyperbolic-parabolic systems. *SIAM Journal on Numerical Analysis*, 31(6):1577–1604, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Konen:1967:SSE

[KL67] H. P. Konen and H. A. Luther. Some singular explicit fifth order Runge–Kutta solutions. *SIAM Journal on Numerical Analysis*, 4(4):607–619, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kimchi:1976:RBA

[KL76] E. Kimchi and D. Leviatan. On restricted best approximation to functions with restricted derivatives. *SIAM Journal on Numerical Analysis*, 13(1):51–53, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keast:1979:SFS

[KL79] P. Keast and J. N. Lyness. On the structure of fully symmetric multidimensional quadrature rules. *SIAM Journal on Numerical Analysis*, 16(1): 11–29, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keller:1982:IIB

[KL82] Herbert B. Keller and Marianela Lentini. Invariant imbedding, the box scheme and an equivalence between them. *SIAM Journal on Numerical Analysis*, 19(5):942–962, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kloeden:1986:SAS

[KL86] P. E. Kloeden and J. Lorenz. Stable attracting sets in dynamical systems and in their one-step discretizations.

SIAM Journal on Numerical Analysis, 23(5):986–995, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kuo:1989:TLF

[KL89] C.-C. Jay Kuo and Bernard C. Levy. A two-level four-color SOR method. *SIAM Journal on Numerical Analysis*, 26(1): 129–151, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kellogg:1996:FEM

[KL96] R. Bruce Kellogg and Biyue Liu. A finite element method for the compressible Stokes equations. *SIAM Journal on Numerical Analysis*, 33(2): 780–788, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kellogg:1997:PFE

[KL97] R. Bruce Kellogg and Biyue Liu. A penalized finite-element method for a compressible Stokes system. *SIAM Journal on Numerical Analysis*, 34(3):1093–1105, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27327`.

Klar:1998:AIS

[Kla98] Axel Klar. An asymptotic-induced scheme for nonstationary transport equations in the diffusive limit. *SIAM Journal on Numerical Analysis*, 35(3):1073–1094, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30555`.

Klar:1999:APN

[Kla99] Axel Klar. An asymptotic preserving numerical scheme for kinetic equations in the low Mach number limit. *SIAM Journal on Numerical Analysis*, 36(5): 1507–1527, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32176`.

Koepfler:1994:MAI

[KLM94] G. Koepfler, C. Lopez, and J. M. Morel. A multiscale algorithm for image segmentation by variational method. *SIAM Journal on Numerical Analysis*, 31(1): 282–299, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kellogg:1976:CPB

[KLY76] R. B. Kellogg, T. Y. Li, and J. Yorke. A constructive proof of the Brouwer fixed-point theorem and computational results. *SIAM Journal on Numerical Analysis*, 13 (4):473–483, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kwon:1988:EEM

[KM88] Yonghoon Kwon and Fabio A. Milner. L^∞-error estimates for mixed methods for semilinear second-order elliptic equations. *SIAM Journal on Numerical Analysis*, 25(1): 46–53, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kramer:1993:AGM

[KM93] M. E. Kramer and R. M. M. Mattheij. Application of global methods in parallel shooting. *SIAM Journal on Numerical Analysis*, 30(6): 1723–1739, December 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kunkel:1996:NCD

[KM96] Peter Kunkel and Volker Mehrmann. A new class of discretization methods for the solution of linear differential-algebraic equations with variable coefficients. *SIAM Journal on Numerical Analysis*, 33 (5):1941–1961, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24036`.

Karakashian:1999:STF

[KM99] Ohannes Karakashian and Charalambos Makridakis. A space-time finite element method for the nonlinear Schrödinger equation: The continuous Galerkin method. *SIAM Journal on Numerical Analysis*, 36(6):1779–1807, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33011`.

Kozlov:1994:CHI

[KMR94] Vladimir Kozlov, Vladimir Maz'ya, and Leonid Rozin. On certain hybrid iterative methods for solving boundary value problems. *SIAM Journal on Numerical Analysis*, 31(1):101–110, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kammerer:1972:CCG

[KN72] W. J. Kammerer and M. Z. Nashed. On the convergence of the conjugate gradient method for singular linear operator equations. *SIAM Journal on Numerical Analysis*, 9(1):165–181, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Krawczyk:1985:ISR

[KN85] R. Krawczyk and A. Neumaier. Interval slopes for rational functions and associated centered forms. *SIAM Journal on Numerical Analysis*, 22(3):604–616, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kelley:1988:PQN

[KN88] C. T. Kelley and J. I. Northrup. A pointwise quasi-Newton method for integral equations. *SIAM Journal on Numerical Analysis*, 25 (5):1138–1155, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kreiss:1986:NMS

[KNB86] Heinz-Otto Kreiss, N. K. Nichols, and David L. Brown. Numerical methods for stiff two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 23(2): 325–368, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Knorrenschild:1992:DAE

[Kno92] Michael Knorrenschild. Differential/algebraic equations as stiff ordinary differential equations. *SIAM Journal on Numerical Analysis*, 29(6): 1694–1715, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kreiss:1979:SFM

[KO79] Heinz-Otto Kreiss and Joseph Oliger. Stability of the Fourier method. *SIAM Journal on Numerical Analysis*, 16 (3):421–433, June 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Koch:1984:CST

[Koc84] Per Erik Koch. Collocation by L-splines at transformed Gaussian points. *SIAM Journal on Numerical Analysis*, 21(6):1107–1114, December 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kohler:1995:OPM

[Köh95] P. Köhler. Order-preserving mesh spacing for compound quadrature formulas and functions with endpoint singularities. *SIAM Journal on Numerical Analysis*, 32(2): 671–686, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Koster:1973:SFD

[Kos73] D. E. Koster. Stability of a finite difference scheme with "Wrong" boundary conditions. *SIAM Journal on Numerical Analysis*, 10(6):1039–1046, December 1973. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Kovarik:1970:SIM

[Kov70] Zdislav Kovarik. Some iterative methods for improving orthonormality. *SIAM Journal on Numerical Analysis*, 7 (3):386–389, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kaufman:1978:MSN

[KP78] Linda Kaufman and Victor Pereyra. A method for separable nonlinear least squares problems with separable nonlinear equality constraints. *SIAM Journal on Numerical Analysis*, 15(1):12–20, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Keller:1979:DMD

[KP79] H. B. Keller and V. Pereyra. Difference methods and deferred corrections for ordinary boundary value problems. *SIAM Journal on Numerical Analysis*, 16(2): 241–259, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Klauder:1985:NIM

[KP85] John R. Klauder and Wesley P. Petersen. Numerical integration of multiplicative-noise stochastic differential equations. *SIAM Journal on Numerical Analysis*, 22(6): 1153–1166, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kamowitz:1987:MM

[KP87] David Kamowitz and Seymour V. Parter. On MGR[ν] multigrid methods. *SIAM Journal on Numerical Analysis*, 24(2):366–381, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kim:1996:PCS

[KP96] Sang Dong Kim and Seymour V. Parter. Preconditioning Chebyshev spectral collocation method for elliptic partial differential equations. *SIAM Journal on Numerical Analysis*, 33(6): 2375–2400, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27599`.

Kim:1997:PCS

[KP97] Sang Dong Kim and Seymour V. Parter. Preconditioning Chebyshev spectral collocation by finite-difference operators. *SIAM Journal on Numerical Analysis*, 34(3):939–958, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http:/`

/epubs.siam.org/sam-bin/dbq/article/28503.

Kloeden:1995:EMW

[KPH95] P. E. Kloeden, E. Platen, and N. Hofmann. Extrapolation methods for the weak approximation of Ito diffusions. *SIAM Journal on Numerical Analysis*, 32(5):1519–1534, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kahan:1982:RBA

[KPJ82] W. Kahan, B. N. Parlett, and E. Jiang. Residual bounds on approximate eigensystems of nonnormal matrices. *SIAM Journal on Numerical Analysis*, 19(3):470–484, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kammerer:1972:LCS

[KR72] W. J. Kammerer and G. W. Reddien, Jr. Local convergence of smooth cubic spline interpolates. *SIAM Journal on Numerical Analysis*, 9 (4):687–694, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Krabill:1974:ERN

[KR74] D. Krabill and M. Reichaw. Expansions of real numbers relative to a sequence of functions. *SIAM Journal on Numerical Analysis*, 11(1):75–86, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kreimer:1988:SFC

[KR88] J. Kreimer and R. Y. Rubinstein. Smoothed functionals and constrained stochastic approximation. *SIAM Journal on Numerical Analysis*, 25 (2):470–487, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kloucek:1994:SFS

[KR94a] Petr Klouček and Franz S. Rys. Stability of the fractional step Θ-scheme for the nonstationary Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 31(5):1312–1335, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kroner:1994:CUF

[KR94b] Dietmar Kröner and Mirko Rokyta. Convergence of upwind finite volume schemes for scalar conservation laws in two dimensions. *SIAM Journal on Numerical Analysis*, 31 (2):324–343, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kapur:1997:HOC

[KR97] Sharad Kapur and Vladimir Rokhlin. High-order corrected trapezoidal quadrature rules for singular functions. *SIAM Journal on Numerical Analysis*, 34(4): 1331–1356, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28784`.

Krawczyk:1987:OEG

[Kra87] R. Krawczyk. Optimal enclosure of a generalized zero set of a function strip. *SIAM Journal on Numerical Analysis*, 24(5):1202–1211, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kimchi:1978:RRA

[KRD78] E. Kimchi and N. Richter-Dyn. Restricted range approximation of k-convex functions in monotone norms. *SIAM Journal on Numerical Analysis*, 15(5):1030–1038, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kreiss:1978:DMS

[Kre78a] Heinz-Otto Kreiss. Difference methods for stiff ordinary differential equations. *SIAM Journal on Numerical Analysis*, 15(1):21–58, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kress:1978:ENT

[Kre78b] Rainer Kress. On error norms of the trapezoidal rule. *SIAM Journal on Numerical Analysis*, 15(3):433–443, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kreiss:1979:PDT

[Kre79] Heinz-Otto Kreiss. Problems with different time scales for ordinary differential equations. *SIAM Journal on Numerical Analysis*, 16(6):980–998, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kreiss:1991:DOB

[Kre91] Gunilla Kreiss. The dependence on the outflow boundary condition of the solution of steady, incompressible Euler equations. *SIAM Journal on Numerical Analysis*, 28 (5):1242–1264, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Krizek:1992:MAC

[Kří92] Michal Křížek. On the maximum angle condition for linear tetrahedral elements. *SIAM Journal on Numerical Analysis*, 29(2): 513–520, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Krogh:1973:ACS

[Kro73] Fred T. Krogh. Algorithms for changing the step size. *SIAM Journal on Numerical Analysis*, 10(5):949–965, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kroo:1981:EED

[Kro81] A. Kroó. Error estimations for deviation of best uniform, discrete and L_q-approximations. *SIAM Journal on Numerical Analysis*, 18(5):891–896, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kruzik:1998:NAD

[Kru98] Martin Kruzík. Numerical approach to double well problems. *SIAM Journal on Numerical Analysis*, 35 (5):1833–1849, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28647`.

Kelley:1983:NAM

[KS83] C. T. Kelley and R. Suresh. A new acceleration method for Newton's method at singular points. *SIAM Journal on Numerical Analysis*, 20(5):1001–1009, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kelley:1987:QNM

[KS87] C. T. Kelley and E. W. Sachs. A quasi-Newton method for elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 24(3): 516–531, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kreiss:1992:MLH

[KS92a] Heinz-Otto Kreiss and Godela Scherer. Method of lines for hyperbolic differential equations. *SIAM Journal on Numerical Analysis*, 29(3): 640–646, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kunisch:1992:RSM

[KS92b] K. Kunisch and E. W. Sachs. Reduced SQP methods for parameter identification problems. *SIAM Journal on Numerical Analysis*, 29(6):1793–1820, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Knyazev:1994:PGT

[KS94] Andrew V. Knyazev and Alexander L. Skorokhodov. Preconditioned gradient-type iterative methods in a subspace for partial generalized symmetric eigenvalue problems. *SIAM Journal on Numerical Analysis*, 31(4):1226–

1239, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kasenally:1997:AMP

[KS97a] Ebrahim M. Kasenally and Valeria Simoncini. Analysis of a minimum perturbation algorithm for nonsymmetric linear systems. *SIAM Journal on Numerical Analysis*, 34(1):48–66, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26684.

Kellogg:1997:OAS

[KS97b] R. Bruce Kellogg and Martin Stynes. Optimal approximability of solutions of singularly perturbed two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 34(5):1808–1816, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/29026.

Kellogg:1999:WSP

[KS99] R. Bruce Kellogg and Martin Stynes. n-widths and singularly perturbed boundary value problems. *SIAM Journal on Numerical Analysis*, 36(5):1604–1620, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/32725.

Koc:1999:EAN

[KSC99] S. Koc, Jiming Song, and W. C. Chew. Error analysis for the numerical evaluation of the diagonal forms of the scalar spherical addition theorem. *SIAM Journal on Numerical Analysis*, 36(3):906–921, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/32811.

Kellogg:1980:UCR

[KSS80] R. B. Kellogg, G. R. Shubin, and A. B. Stephens. Uniqueness and the cell Reynolds number. *SIAM Journal on Numerical Analysis*, 17(6):733–739, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kung:1976:OOE

[KT76] H. T. Kung and J. F. Traub. Optimal order and efficiency for iterations with two evaluations. *SIAM Journal on Numerical Analysis*, 13(1):84–99, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Khaliq:1986:SSM

[KT86] A. Q. M. Khaliq and E. H. Twizell. L_0-stable splitting methods for the simple heat equation in two space dimensions with homogeneous boundary conditions. *SIAM Journal on Numerical Analysis*, 23(3):473–484, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kuo:1992:DMF

[KT92] Hung Ju Kuo and Neil S. Trudinger. Discrete methods for fully nonlinear elliptic equations. *SIAM Journal on Numerical Analysis*, 29(1): 123–135, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kunisch:1997:SPS

[KT97] K. Kunisch and X.-C. Tai. Sequential and parallel splitting methods for bilinear control problems in Hilbert spaces. *SIAM Journal on Numerical Analysis*, 34(1):91–118, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25525`.

Kahaner:1971:EWQ

[KU71] David K. Kahaner and J. L. Ullman. Equal weight quadrature on infinite intervals. *SIAM Journal on Numerical Analysis*, 8(1):75–79, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kublanovskaya:1970:ASG

[Kub70] V. N. Kublanovskaya. On an approach to the solution of the generalized latent value problem for λ-matrices. *SIAM Journal on Numerical Analysis*, 7(4):532–537, December 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kumar:1988:DCT

[Kum88] Sunil Kumar. A discrete collocation-type method for Hammerstein equations. *SIAM Journal on Numerical Analysis*, 25(2):328–341, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kung:1975:CCA

[Kun75] H. T. Kung. The computational complexity of algebraic numbers. *SIAM Journal on Numerical Analysis*, 12 (1):89–96, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kunkel:1988:QCM

[Kun88] P. Kunkel. Quadratically convergent methods for the computation of unfolded singularities. *SIAM Journal on Nu-*

merical Analysis, 25(6):1392–1408, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kurowski:1967:SRF

[Kur67] G. J. Kurowski. The semidiscrete Riemann function. *SIAM Journal on Numerical Analysis*, 4(4):489–498, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kushner:1968:NSD

[Kus68] Harold J. Kushner. On the numerical solution of degenerate linear and nonlinear elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 5(4):664–679, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kuttler:1970:FDA

[Kut70] James R. Kuttler. Finite difference approximations for eigenvalues of uniformly elliptic operators. *SIAM Journal on Numerical Analysis*, 7(2):206–232, June 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kuttler:1972:RSE

[Kut72] James R. Kuttler. Remarks on a Stekloff eigenvalue problem. *SIAM Journal on Numerical Analysis*, 9(1):1–5, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kuttler:1974:DMC

[Kut74] J. R. Kuttler. Direct methods for computing eigenvalues of the finite-difference laplacian. *SIAM Journal on Numerical Analysis*, 11(4):732–740, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kuttler:1979:DE

[Kut79] J. R. Kuttler. Dirichlet eigenvalues. *SIAM Journal on Numerical Analysis*, 16(2):332–338, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kuttler:1982:BSE

[Kut82] J. R. Kuttler. Bounds for Stekloff eigenvalues. *SIAM Journal on Numerical Analysis*, 19(1):121–125, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kutz:1984:AEB

[Küt84] Martin Kütz. Asymptotic error bounds for a class of interpolatory quadratures. *SIAM Journal on Numerical Analysis*, 21(1):167–175, February 1984. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Kuznetsov:1999:NNT

[Kuz99] Yu. A. Kuznetsov. Numerical normalization techniques for all codim 2 bifurcations of equilibria in ODE's. *SIAM Journal on Numerical Analysis*, 36(4): 1104–1124, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/33500.

Keller:1975:DMB

[KW75] H. B. Keller and A. B. White, Jr. Difference methods for boundary value problems in ordinary differential equations. *SIAM Journal on Numerical Analysis*, 12(5): 791–802, October 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kendall:1976:CNG

[KW76] Richard P. Kendall and Mary F. Wheeler. A Crank–Nicolson-H^{-1}–Galerkin procedure for parabolic problems in a single-space variable. *SIAM Journal on Numerical Analysis*, 13(6):861–876, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kaufman:1984:HOF

[KW84] Linda Kaufman and Daniel D. Warner. High-order, fast-direct methods for separable elliptic equations. *SIAM Journal on Numerical Analysis*, 21(4):672–694, August 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Katz:1985:VFE

[KW85] I. Norman Katz and Douglas W. Wang. The p-version of the finite element method for problems requiring C^1-continuity. *SIAM Journal on Numerical Analysis*, 22(6): 1082–1106, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Krishna:1993:SLA

[KW93] Hari Krishna and Yunbiao Wang. The split Levinson algorithm is weakly stable. *SIAM Journal on Numerical Analysis*, 30(5):1498–1508, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Kearfott:1994:ISC

[KX94] R. Baker Kearfott and Zhaoyun Xing. An interval step control for continuation methods. *SIAM Journal on Numerical Analysis*, 31 (3):892–914, June 1994. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Kaneko:1996:SIG

[KX96] Hideaki Kaneko and Yuesheng Xu. Superconvergence of the iterated Galerkin methods for Hammerstein equations. *SIAM Journal on Numerical Analysis*, 33(3): 1048–1064, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Karlin:1966:CSF

[KZ66] Samuel Karlin and Zvi Ziegler. Chebyshevian spline functions. *SIAM Journal on Numerical Analysis*, 3 (3):514–543, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lambert:1967:ANS

[Lam67] Robert J. Lambert. An analysis of the numerical stability of predictor-corrector solutions of nonlinear ordinary differential equations. *SIAM Journal on Numerical Analysis*, 4(4):597–606, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lambert:1971:PCA

[Lam71] J. D. Lambert. Predictor-corrector algorithms with identical regions of stability. *SIAM Journal on Numerical Analysis*, 8(2):337–344, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lam:1976:NBU

[Lam76] Binh Lam. A note on best uniform rational approximation. *SIAM Journal on Numerical Analysis*, 13(6):962–965, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lambert:1981:SPM

[Lam81] J. D. Lambert. Safe point methods for separably stiff systems of ordinary differential equations. *SIAM Journal on Numerical Analysis*, 18(1): 83–101, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). In SIGNUM Meeting on Numerical Ordinary Differential Equations.

Lanczos:1964:END

[Lan64a] C. Lanczos. Evaluation of noisy data. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??):76–85, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic). URL `http://www.jstor.org/stable/2949766`.

Lanczos:1964:I

[Lan64b] Cornelius Lanczos. Introduction. *Journal of the Society for Industrial and Applied Mathematics: Series B,* Numerical Analysis, 1(??):1, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic). URL http://www.jstor.org/stable/2949759.

Lanczos:1964:PAG

[Lan64c] Cornelius Lanczos. A precision approximation of the gamma function. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(1): 86–96, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic). URL http://www.jstor.org/stable/2949767.

Langford:1977:SAB

[Lan77] W. F. Langford. A shooting algorithm for the best least squares solution of two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 14(3): 527–542, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Larsson:1989:LTB

[Lar89] Stig Larsson. The long-time behavior of finite-element approximations of solutions to semilinear parabolic problems. *SIAM Journal on Numerical Analysis*, 26(2): 348–365, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lasiecka:1984:CES

[Las84] Irena Lasiecka. Convergence estimates for semidiscrete approximations of nonselfadjoint parabolic equations. *SIAM Journal on Numerical Analysis*, 21(5):894–909, October 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lautsch:1989:SIF

[Lau89] Michael Lautsch. A spline inversion formula for the Radon transform. *SIAM Journal on Numerical Analysis*, 26(2): 456–467, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lavery:1989:SSS

[Lav89] J. E. Lavery. Solution of steady-state one-dimensional conservation laws by mathematical programming. *SIAM Journal on Numerical Analysis*, 26(5):1081–1089, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lavery:1991:SSS

[Lav91] John E. Lavery. Solution of steady-state, two-dimensional conservation laws by mathematical programming. *SIAM Journal on Numerical Analysis*, 28(1):141–155, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lawson:1966:OFR

[Law66] J. Douglas Lawson. An order five Runge–Kutta process with extended region of stability. *SIAM Journal on Numerical Analysis*, 3(4):593–597, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lawson:1967:GRK

[Law67a] J. Douglas Lawson. Generalized Runge–Kutta processes for stable systems with large Lipschitz constants. *SIAM Journal on Numerical Analysis*, 4(3):372–380, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lawson:1967:OSR

[Law67b] J. Douglas Lawson. An order six Runge–Kutta process with extended region of stability. *SIAM Journal on Numerical Analysis*, 4(4):620–625, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Layton:1983:GMT

[Lay83a] William J. Layton. Galerkin methods for two-point boundary value problems for first order systems. *SIAM Journal on Numerical Analysis*, 20(1):161–171, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Layton:1983:SGM

[Lay83b] William J. Layton. Stable Galerkin methods for hyperbolic systems. *SIAM Journal on Numerical Analysis*, 20(2):221–233, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lazarus:1981:SSS

[Laz81] Roger B. Lazarus. Self-similar solutions for converging shocks and collapsing cavities. *SIAM Journal on Numerical Analysis*, 18(2):316–371, April 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See erratum [Laz82].

Lazarus:1982:ESS

[Laz82] Roger B. Lazarus. Erratum: "Self-Similar Solutions for Converging Shocks and Collapsing Cavities" [SIAM J. Numer. Anal. **18** (1981), no. 2, 316–371, MR 82i:76054]. *SIAM Journal on Numerical Analysis*, 19(5):1090, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [Laz81].

Levrie:1990:CAN

[LB90] Paul Levrie and Adhemar Bultheel. Convergence acceleration for the numerical solution of second-order linear recurrence relations. *SIAM Journal on Numerical Analysis*, 27(1):166–177, February

1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1996:CAV

[LB96a] Y. Li and I. Babuška. A convergence analysis of a *p*-version finite element method for one-dimensional elastoplasticity problem with constitutive laws based on the gauge function method. *SIAM Journal on Numerical Analysis*, 33(2):809–842, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Liu:1996:FEA

[LB96b] W. B. Liu and John W. Barrett. Finite element approximation of some degenerate monotone quasilinear elliptic systems. *SIAM Journal on Numerical Analysis*, 33(1): 88–106, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1997:CAV

[LB97] Yiwei Li and Ivo Babuška. A convergence analysis of an *H*-version finite-element method with high-order elements for two-dimensional elasto-plasticity problems. *SIAM Journal on Numerical Analysis*, 34(3):998–1036, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26357`.

Laubin:1998:SCB

[LB98] Pascal Laubin and Marc Baiwir. Spline collocation for a boundary integral equation on polygons with cuts. *SIAM Journal on Numerical Analysis*, 35 (4):1452–1472, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31835`.

Lecot:1998:QMC

[LC98] Christian Lécot and Ibrahim Coulibaly. A quasi-Monte Carlo scheme using nets for a linear Boltzmann equation. *SIAM Journal on Numerical Analysis*, 35(1):51–70, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29005`.

LeRoux:1994:STN

[Le 94] Marie-Noëlle Le Roux. Semidiscretization in time of nonlinear parabolic equations with blowup of the solution. *SIAM Journal on Numerical Analysis*, 31(1):170–195, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lam:1972:CCW

[LE72] Binh Lam and David Elliott. On a conjecture of C. W. Clenshaw. *SIAM Journal on Numerical Analysis*, 9(1): 44–52, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lamm:1997:NSF

[LE97] Patricia K. Lamm and Lars Eldén. Numerical solution of first-kind Volterra equations by sequential Tikhonov regularization. *SIAM Journal on Numerical Analysis*, 34 (4):1432–1450, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28081.

Lee:1985:RAE

[Lee85] Daniel Lee. On remainders and asymptotic error expansions in cardinal spline interpolation. *SIAM Journal on Numerical Analysis*, 22(6): 1238–1242, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lee:1991:EER

[Lee91] Meei-Yow Lin Lee. Estimation of the error in the reduced basis method solution of differential algebraic equation systems. *SIAM Journal on Numerical Analysis*, 28 (2):512–528, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lee:1992:CCP

[Lee92] E. T. Y. Lee. Corners, cusps, and parametrizations: Variations on a theorem of epstein. *SIAM Journal on Numerical Analysis*, 29(2): 553–565, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lee:1993:LMM

[Lee93] Ping Lee. A Lagrange multiplier method for the interface equations from electromagnetic applications. *SIAM Journal on Numerical Analysis*, 30(2):478–506, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lee:1998:MMP

[Lee98] Chang-Ock Lee. Multigrid methods for the pure traction problem of linear elasticity: Mixed formulation. *SIAM Journal on Numerical Analysis*, 35(1):121–145, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28283.

Leimkuhler:1998:TAW

[Lei98] B. Leimkuhler. Timestep acceleration of waveform relaxation. *SIAM Journal on Numerical Analysis*, 35 (1):31–50, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28002.

Lenoir:1986:OIF

[Len86] M. Lenoir. Optimal isoparametric finite elements and error estimates for domains involving curved boundaries. *SIAM Journal on Numerical Analysis*, 23(3):562–580, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lermit:1975:NMI

[Ler75] R. Jonathan Lermit. Numerical methods for the identification of differential equations. *SIAM Journal on Numerical Analysis*, 12(3):488–500, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lescrenier:1991:CTR

[Les91] M. Lescrenier. Convergence of trust region algorithms for optimization with bounds when strict complementarity does not hold. *SIAM Journal on Numerical Analysis*, 28(2): 476–495, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lether:1970:ERP

[Let70] Frank Lether. An error representation for product cubature rules. *SIAM Journal on Numerical Analysis*, 7 (3):363–365, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lether:1971:CEB

[Let71a] Frank G. Lether. Cubature error bounds for Gauss–Legendre product rules. *SIAM Journal on Numerical Analysis*, 8(1):36–42, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lether:1971:EBF

[Let71b] Frank G. Lether. Error bounds for fully symmetric cubature rules. *SIAM Journal on Numerical Analysis*, 8 (1):49–60, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lether:1971:GPR

[Let71c] Frank G. Lether. A generalized product rule for the circle. *SIAM Journal on Numerical Analysis*, 8(2): 249–253, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lether:1974:CEC

[Let74a] F. G. Lether. Cubature error constants for analytic functions. *SIAM Journal on Numerical Analysis*, 11(2): 232–236, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lether:1974:EBF

[Let74b] F. G. Lether. Error bounds for fully symmetric quadrature rules. *SIAM Journal on Numerical Analysis*, 11 (1):1–9, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Leveque:1982:LTS

[Lev82] Randall J. Leveque. Large time step shock-capturing techniques for scalar conservation laws. *SIAM Journal on Numerical Analysis*, 19(6): 1091–1109, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Leveque:1985:LTS

[Lev85] Randall J. Leveque. A large time step generalization of Godunov's method for systems of conservation laws. *SIAM Journal on Numerical Analysis*, 22(6):1051–1073, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

LeVeque:1988:SOA

[LeV88] Randall J. LeVeque. Second order accuracy of Brenier's time-discrete method for nonlinear systems of conservation laws. *SIAM Journal on Numerical Analysis*, 25(1): 1–7, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

LeVeque:1996:HRC

[LeV96] Randall J. LeVeque. High-resolution conservative algorithms for advection in incompressible flow. *SIAM Journal on Numerical Analysis*, 33 (2):627–665, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1998:DTO

[LFB98] Bingkun Li, Graeme Fairweather, and Bernard Bialecki. Discrete-time orthogonal spline collocation methods for Schrödinger equations in two space variables. *SIAM Journal on Numerical Analysis*, 35(2): 453–477, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30239`.

Lyness:1980:STR

[LG80] J. N. Lyness and A. C. Genz. On simplex trapezoidal rule families. *SIAM Journal* on Numerical Analysis, 17(1): 126–147, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lopez-Gomez:1992:NCC

[LGMMV92] Julián López-Gómez, Marcela Molina-Meyer, and Mónica Villarreal. Numerical computation of coexistence states. *SIAM Journal on Numerical Analysis*, 29(4):1074–1092, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1983:LAZ

[Li83a] Tien-Yien Li. On locating all zeros of an analytic function within a bounded domain by a revised Delves/ Lyness method. *SIAM Journal on Numerical Analysis*, 20(4):865–871, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1983:RRC

[Li83b] Zi Cai Li. On the reduced rate of convergence for a nonconforming combined method. *SIAM Journal on Numerical Analysis*, 20(1):86–93, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1987:GDM

[Li87] Ronghua Li. Generalized difference methods for a nonlinear Dirichlet problem. *SIAM Journal on Numerical Analysis*, 24(1):77–88, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1988:SFD

[Li88] Guangye Li. The secant/ finite difference algorithm for solving sparse nonlinear systems of equations. *SIAM Journal on Numerical Analysis*, 25(5):1181–1196, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1991:NCV

[Li91] Zi-Cai Li. On nonconforming combinations of various finite element methods for solving elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 28(2): 446–475, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1998:FIA

[Li98] Zhilin Li. A fast iterative algorithm for elliptic interface problems. *SIAM Journal on Numerical Analysis*, 35 (1):230–254, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29132`.

Linz:1969:NMV

[Lin69] Peter Linz. Numerical methods for Volterra integral equations with singular kernels. *SIAM Journal on Numerical Analysis*, 6(3):365–374, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lindberg:1972:SIA

[Lin72] Bengt Lindberg. A simple interpolation algorithm for improvement of the numerical solution of a differential equation. *SIAM Journal on Numerical Analysis*, 9(4):662–668, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Linz:1974:MAS

[Lin74] Peter Linz. A method for the approximate solution of linear integro-differential equations. *SIAM Journal on Numerical Analysis*, 11(1):137–144, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lindberg:1977:COS

[Lin77a] Bengt Lindberg. Characterization of optimal stepsize sequences for methods for stiff differential equations. *SIAM Journal on Numerical Analysis*, 14(5):859–887, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Linz:1977:GTA

[Lin77b] Peter Linz. A general theory for the approximate solution of operator equations of the second kind. *SIAM Journal on Numerical Analysis*, 14 (3):543–554, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Liniger:1983:CSO

[Lin83] Werner Liniger. The *A*-contractive second-order multistep formulas with variable steps. *SIAM Journal on Numerical Analysis*, 20(6):1231–1238, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lin:1985:NSH

[Lin85] Tzu Chu Lin. The numerical solution of Helmholtz's equation for the exterior Dirichlet problem in three dimensions. *SIAM Journal on Numerical Analysis*, 22(4):670–686, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lin:1988:NAP

[Lin88] J. T. Lin. The numerical analysis of a phase field model in moving boundary problems. *SIAM Journal on Numerical Analysis*, 25(5):1015–

1031, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lin:1990:GMN

[Lin90] Yanping Lin. Galerkin methods for nonlinear parabolic integrodifferential equations with nonlinear boundary conditions. *SIAM Journal on Numerical Analysis*, 27(3): 608–621, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Linz:1991:BEC

[Lin91] Peter Linz. Bounds and estimates for condition numbers of integral equations. *SIAM Journal on Numerical Analysis*, 28(1):227–235, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Linzer:1992:STB

[Lin92] Elliot Linzer. On the stability of transform-based circular deconvolution. *SIAM Journal on Numerical Analysis*, 29(5):1482–1492, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lin:1997:SRM

[Lin97] Ping Lin. A sequential regularization method for time-dependent incompressible Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 34(3):1051–1071, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27052`.

Lipow:1973:SFI

[Lip73] Peter R. Lipow. Spline functions and intermediate best quadrature formulas. *SIAM Journal on Numerical Analysis*, 10(1):127–136, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Liu:1993:MPS

[Liu93] Xu-Dong Liu. A maximum principle satisfying modification of triangle based adaptive stencils for the solution of scalar hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 30(3): 701–716, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Liu:1994:SAL

[Liu94] Jun Liu. A sensitivity analysis for least-squares ill-posed problems using the Haar basis. *SIAM Journal on Numerical Analysis*, 31(5):1486–1496, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Liu:1999:NSI

[Liu99] Yunkang Liu. Numerical solution of implicit neutral functional differential equations. *SIAM Journal on Numerical Analysis*, 36(2): 516–528, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/31867.

Leaf:1974:EBM

[LK74] Gary K. Leaf and Hans G. Kaper. L^∞-error bounds for multivariate Lagrange approximation. *SIAM Journal on Numerical Analysis*, 11(2): 363–381, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lentini:1980:BVP

[LK80] Marianela Lentini and Herbert B. Keller. Boundary value problems on semi-infinite intervals and their numerical solution. *SIAM Journal on Numerical Analysis*, 17(4):577–604, August 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ladeveze:1983:EEP

[LL83] P. Ladevèze and D. Leguillon. Error estimate procedure in the finite element method and applications. *SIAM Journal on Numerical Analysis*, 20 (3):485–509, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lin:1989:RML

[LL89] San Yih Lin and Mitchell Luskin. Relaxation methods for liquid crystal problems. *SIAM Journal on Numerical Analysis*, 26(6):1310–1324, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

LeVeque:1994:IIM

[LL94] Randall J. LeVeque and Zhi Lin Li. The immersed interface method for elliptic equations with discontinuous coefficients and singular sources. *SIAM Journal on Numerical Analysis*, 31(4): 1019–1044, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See erratum [LL95].

LeVeque:1995:EII

[LL95] Randall J. LeVeque and Zhi Lin Li. Erratum: "The immersed interface method for elliptic equations with discontinuous coefficients and singular sources" [SIAM J. Numer. Anal. **31** (1994), no. 4, 1019–1044, MR 95g:65139]. *SIAM Journal on Numerical Analysis*, 32(5):1704, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [LL94].

Largillier:1996:FRM

[LL96a] Alain Largillier and Balmohan V. Limaye. Finite-rank methods and their stability for coupled systems of operator equations. *SIAM Journal on Numerical Analysis*, 33 (2):707–728, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Layton:1996:MMI

[LL96b] W. Layton and H. W. J. Lenferink. A multilevel mesh independence principle for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 33(1):17–30, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1998:FEA

[LL98] Bo Li and Mitchell Luskin. Finite element analysis of microstructure for the cubic to tetragonal transformation. *SIAM Journal on Numerical Analysis*, 35 (1):376–392, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30111`.

Luo:1999:MFE

[LL99] Zhendong Luo and Ruxun Liu. Mixed finite element analysis and numerical solitary solution for the RLW equation. *SIAM Journal on Numerical Analysis*, 36 (1):89–104, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31299`.

Larcher:1996:OPN

[LLNS96] G. Larcher, A. Lauss, H. Niederreiter, and W. Ch. Schmid. Optimal polynomials for (t, m, s)-nets and numerical integration of multivariate Walsh series. *SIAM Journal on Numerical Analysis*, 33(6): 2239–2253, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26470`.

Lyness:1967:NDA

[LM67] J. N. Lyness and C. B. Moler. Numerical differentiation of analytic functions. *SIAM Journal on Numerical Analysis*, 4(2):202–210, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lyness:1977:QRR

[LM77] J. N. Lyness and G. Monegato. Quadrature rules for regions having regular hexagonal symmetry. *SIAM Journal on Numerical Analysis*, 14 (2):283–295, April 1977. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Lawson:1978:EFO

[LM78] J. D. Lawson and J. Ll. Morris. The extrapolation of first order methods for parabolic partial differential equations. I. *SIAM Journal on Numerical Analysis*, 15(6):1212–1224, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lions:1979:SAS

[LM79] P. L. Lions and B. Mercier. Splitting algorithms for the sum of two nonlinear operators. *SIAM Journal on Numerical Analysis*, 16(6):964–979, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lyche:1986:MOA

[LM86] T. Lyche and K. Mørken. Making the OSLO algorithm more efficient. *SIAM Journal on Numerical Analysis*, 23(3):663–675, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lasiecka:1988:DCR

[LM88] I. Lasiecka and A. Manitius. Differentiability and convergence rates of approximating semigroups for retarded functional-differential equations. *SIAM Journal on Numerical Analysis*, 25(4):883–907, August 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lentini:1990:CDD

[LM90a] M. Lentini and R. März. Conditioning and dichotomy in differential algebraic equations. *SIAM Journal on Numerical Analysis*, 27(6):1519–1526, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lentini:1990:CBV

[LM90b] M. Lentini and R. März. The conditioning of boundary value problems in transferable differential-algebraic equations. *SIAM Journal on Numerical Analysis*, 27(4):1001–1015, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Luskin:1992:AFE

[LM92] Mitchell Luskin and Ling Ma. Analysis of the finite element approximation of microstructure in micromagnetics. *SIAM Journal on Numerical Analysis*, 29(2):320–331, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1987:BMS

[LMS87] Zi-Cai Li, Rudolf Mathon, and Pavol Sermer. Boundary methods for solving elliptic problems with singularities and interfaces. *SIAM Journal on Numerical Analysis*, 24 (3):487–498, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lin:1997:CGS

[LMS97] Peixiong Lin, K. W. Morton, and E. Süli. Characteristic Galerkin schemes for scalar conservation laws in two and three space dimensions. *SIAM Journal on Numerical Analysis*, 34(2):779–796, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25929`.

Loeb:1969:UGW

[LMST69] H. L. Loeb, D. G. Moursund, L. L. Schumaker, and G. D. Taylor. Uniform generalized weight function polynomial approximation with interpolation. *SIAM Journal on Numerical Analysis*, 6(2): 284–293, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lazarov:1996:FVM

[LMV96] R. D. Lazarov, Ilya D. Mishev, and P. S. Vassilevski. Finite volume methods for convection-diffusion problems. *SIAM Journal on Numerical Analysis*, 33(1): 31–55, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Larsen:1982:FDA

[LN82] Edward W. Larsen and Paul Nelson. Finite-difference approximations and superconvergence for the discrete-ordinate equations in slab geometry. *SIAM Journal on Numerical Analysis*, 19(2): 334–348, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lin:1997:PWH

[LNC97] Fu-Rong Lin, Michael K. Ng, and Raymond H. Chan. Preconditioners for Wiener–Hopf equations with high-order quadrature rules. *SIAM Journal on Numerical Analysis*, 34 (4):1418–1431, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27098`.

Li:1982:FSF

[LNOP82] M. R. Li, B. Nour-Omid, and B. N. Parlett. A fast solver free of fill-in for finite element problems. *SIAM Journal on Numerical Analysis*, 19(6):1233–1242, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lubich:1995:RKS

[LNS95] Ch. Lubich, K. Nipp, and D. Stoffer. Runge–Kutta solutions of stiff differential equations near stationary points. *SIAM Journal on Numerical Analysis*, 32(4): 1296–1307, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lozier:1990:CPL

[LO90] D. W. Lozier and F. W. J. Olver. Closure and precision in level-index arithmetic. *SIAM Journal on Numerical Analysis*, 27(5):1295–1304, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Liu:1996:NHO

[LO96] Xu-Dong Liu and Stanley Osher. Nonoscillatory high order accurate self-similar maximum principle satisfying shock capturing schemes I. *SIAM Journal on Numerical Analysis*, 33(2):760–779, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Locher:1973:NBQ

[Loc73] Franz Locher. Norm bounds of quadrature processes. *SIAM Journal on Numerical Analysis*, 10(4):553–558, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Loeb:1966:AGR

[Loe66] H. L. Loeb. Approximation by generalized rationals. *SIAM Journal on Numerical Analysis*, 3(1):34–55, March 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Loewy:1970:GTT

[Loe70] Raphael Loewy. Gerschgorin-type theorems for partitioned matrices. *SIAM Journal on Numerical Analysis*, 7(1): 125–128, March 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lorentz:1964:EA

[Lor64] G. G. Lorentz. Entropy and its applications. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??): 97–103, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic).

Lorenz:1984:ADS

[Lor84] Jens Lorenz. Analysis of difference schemes for a stationary shock problem. *SIAM Journal on Numerical Analysis*, 21(6):1038–1053, December 1984. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Lentini:1985:CRB

[LOR85] Marianela Lentini, Michael R. Osborne, and Robert D. Russell. The close relationships between methods for solving two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 22(2): 280–309, April 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lord:1997:AIM

[Lor97] Gabriel James Lord. Attractors and inertial manifolds for finite-difference approximations of the complex Ginzburg–Landau equation. *SIAM Journal on Numerical Analysis*, 34(4): 1483–1512, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28554`.

Lotstedt:1992:GIC

[Löt92] Per Lötstedt. Grid independent convergence of the multigrid method for first-order equations. *SIAM Journal on Numerical Analysis*, 29 (5):1370–1394, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lovadina:1996:NCM

[Lov96] C. Lovadina. A new class of mixed finite element methods for Reissner–Mindlin plates. *SIAM Journal on Numerical Analysis*, 33(6): 2457–2467, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26506`.

Lentini:1977:AFD

[LP77] M. Lentini and V. Pereyra. An adaptive finite difference solver for nonlinear two-point boundary problems with mild boundary layers. *SIAM Journal on Numerical Analysis*, 14 (1):91–111, March 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Locker:1978:OEE

[LP78] John Locker and P. M. Prenter. Optimal L^2 and L^∞ error estimates for continuous and discrete least squares methods for boundary value problems. *SIAM Journal on Numerical Analysis*, 15(6): 1151–1160, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Locker:1980:RDO

[LP80] John Locker and P. M. Prenter. Regularization with differential operators. II. weak least squares finite element solutions to first kind integral equations. *SIAM Journal on Numerical Analysis*, 17 (2):247–267, April 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lesaint:1991:EAR

[LP91] P. Lesaint and J. Pousin. Existence and approximation results for thermal boundary layer equations of reactive flows. *SIAM Journal on Numerical Analysis*, 28(4):1030–1046, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Leimkuhler:1991:AMC

[LPG91] B. Leimkuhler, L. R. Petzold, and C. W. Gear. Approximation methods for the consistent initialization of differential-algebraic equations. *SIAM Journal on Numerical Analysis*, 28(1):205–226, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

LeRoux:1984:CAL

[LQ84] A. Y. Le Roux and P. Quesseveur. Convergence of an antidiffusion Lagrange–Euler scheme for quasi-linear equations. *SIAM Journal on Numerical Analysis*, 21(5):985–994, October 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lucas:1972:SCM

[LR72] Thomas R. Lucas and George W. Reddien, Jr. Some collocation methods for nonlinear boundary value problems. *SIAM Journal on Numerical Analysis*, 9(2):341–356, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Luskin:1982:SPG

[LR82] Mitchell Luskin and Rolf Rannacher. On the smoothing property of the Galerkin method for parabolic equations. *SIAM Journal on Numerical Analysis*, 19(1):93–113, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lipton:1979:GND

[LRT79] Richard J. Lipton, Donald J. Rose, and Robert Endre Tarjan. Generalized nested dissection. *SIAM Journal on Numerical Analysis*, 16(2): 346–358, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lambert:1972:MMV

[LS72] J. D. Lambert and S. T. Sigurdsson. Multistep methods with variable matrix coefficients. *SIAM Journal on Numerical Analysis*, 9(4):715–

733, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lyche:1973:CSI

[LS73] Tom Lyche and Larry L. Schumaker. Computation of smoothing and interpolating natural splines via local bases. *SIAM Journal on Numerical Analysis*, 10(6):1027–1038, December 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Liu:1976:CAC

[LS76] Wai-Hung Liu and Andrew H. Sherman. Comparative analysis of the Cuthill–McKee and the reverse Cuthill–McKee ordering algorithms for sparse matrices. *SIAM Journal on Numerical Analysis*, 13(2):198–213, April 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lai:1997:SDI

[LS97a] Ming-Jun Lai and Larry L. Schumaker. Scattered data interpolation using C^2 supersplines of degree six. *SIAM Journal on Numerical Analysis*, 34(3):905–921, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27317`.

Lyness:1997:CRP

[LS97b] J. N. Lyness and I. H. Sloan. Cubature rules of prescribed merit. *SIAM Journal on Numerical Analysis*, 34(2):586–602, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26748`.

Lai:1999:APS

[LS99] Ming-Jun Lai and Larry L. Schumaker. On the approximation power of splines on triangulated quadrangulations. *SIAM Journal on Numerical Analysis*, 36(1):143–159, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32208`.

Larsson:1994:BFE

[LSS94] S. Larsson and J. M. Sanz-Serna. The behavior of finite element solutions of semilinear parabolic problems near stationary points. *SIAM Journal on Numerical Analysis*, 31(4):1000–1018, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lin:1990:EIC

[LSX90] Q. Lin, I. H. Sloan, and R. Xie. Extrapolation of the iterated-collocation method for integral equations of the second kind. *SIAM Journal on Numerical Analysis*, 27(6): 1535–1541, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1987:NSC

[LSY87] Tien-Yien Li, Tim Sauer, and James A. Yorke. Numerical solution of a class of deficient polynomial systems. *SIAM Journal on Numerical Analysis*, 24(2): 435–451, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1989:CHE

[LSY89] T. Y. Li, Tim Sauer, and J. A. Yorke. The cheater's homotopy: an efficient procedure for solving systems of polynomial equations. *SIAM Journal on Numerical Analysis*, 26(5):1241–1251, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Littell:1997:EAS

[LSZ97] Todd R. Littell, Robert D. Skeel, and Meiqing Zhang. Error analysis of symplectic multiple time stepping. *SIAM Journal on Numerical Analysis*, 34(5):1792–1807, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28709`.

Loscalzo:1967:SFA

[LT67] Frank R. Loscalzo and Thomas D. Talbot. Spline function approximations for solutions of ordinary differential equations. *SIAM Journal on Numerical Analysis*, 4 (3):433–445, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lynn:1968:UMD

[LT68] M. Stuart Lynn and William P. Timlake. The use of multiple deflations in the numerical solution of singular systems of equations, with applications to potential theory. *SIAM Journal on Numerical Analysis*, 5(2):303–322, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lenoir:1988:LFE

[LT88] M. Lenoir and A. Tounsi. The localized finite element method and its application to the two-dimensional seakeeping problem. *SIAM Journal on Numerical Analysis*, 25(4):729–752, August 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

LeRoux:1989:NSS

[LT89a] Marie-Noëlle Le Roux and Vidar Thomée. Numerical solution of semilinear integrodifferential equations of parabolic type with nonsmooth data. *SIAM Journal on Numerical Analysis*, 26(6): 1291–1309, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lesaint:1989:AHE

[LT89b] P. Lesaint and R. Touzani. Approximation of the heat equation in a variable domain with application to the Stefan problem. *SIAM Journal on Numerical Analysis*, 26(2): 366–379, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Layton:1998:TLM

[LT98] W. Layton and L. Tobiska. A two-level method with backtracking for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 35 (5):2035–2054, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30230`.

Lin:1991:RVP

[LTW91] Yan Ping Lin, Vidar Thomée, and Lars B. Wahlbin. Ritz-volterra projections to finite-element spaces and applications to integrodifferential and related equations. *SIAM Journal on Numerical Analysis*, 28(4):1047–1070, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lin:1995:CCR

[LTW95a] L. Lin, J. B. Temple, and J. Wang. A comparison of convergence rates for Godunov's method and Glimm's method in resonant nonlinear systems of conservation laws. *SIAM Journal on Numerical Analysis*, 32(3):824–840, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lin:1995:SOG

[LTW95b] Long Wei Lin, Blake Temple, and Jing Hua Wang. Suppression of oscillations in Godunov's method for a resonant non-strictly hyperbolic system. *SIAM Journal on Numerical Analysis*, 32(3): 841–864, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Langseth:1996:COS

[LTW96] J. O. Langseth, A. Tveito, and R. Winther. On the convergence of operator splitting applied to conservation laws with source terms. *SIAM Journal on Numerical Analysis*, 33(3):843–863, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lucas:1974:EBI

[Luc74] Thomas R. Lucas. Error bounds for interpolating cubic splines under various end conditions. *SIAM Journal on Numerical Analysis*, 11(3): 569–584, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lucas:1982:AEI

[Luc82] Thomas R. Lucas. Asymptotic expansions for interpolating periodic splines. *SIAM Journal on Numerical Analysis*, 19(5):1051–1066, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lucier:1985:EBM

[Luc85a] Bradley J. Lucier. Error bounds for the methods of Glimm, Godunov and LeVeque. *SIAM Journal on Numerical Analysis*, 22(6):1074–1081, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lucier:1985:SAN

[Luc85b] Bradley J. Lucier. A stable adaptive numerical scheme for hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 22(1):180–203, February 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Luenberger:1970:CRM

[Lue70] David G. Luenberger. The conjugate residual method for constrained minimization problems. *SIAM Journal on Numerical Analysis*, 7 (3):390–398, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Luskin:1979:APN

[Lus79a] Mitchell Luskin. An approximation procedure for nonsymmetric, nonlinear hyperbolic systems with integral boundary conditions. *SIAM Journal on Numerical Analysis*, 16(1):145–164, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Luskin:1979:GMN

[Lus79b] Mitchell Luskin. A Galerkin method for nonlinear parabolic equations with nonlinear boundary conditions. *SIAM Journal on Numerical Analysis*, 16(2):284–299, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lustman:1986:TES

[Lus86] Liviu Lustman. The time evolution of spectral discretizations of hyperbolic systems. *SIAM Journal on Numerical Analysis*, 23(6):1193–1198, December 1986. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Landriani:1990:EES

[LV90] Giovanni Sacchi Landriani and Hervé Vandeven. Error estimates for the spectral approximation of the nonstationary Stokes problem. *SIAM Journal on Numerical Analysis*, 27(5):1160–1186, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1995:FDC

[LVQ95] S. Li and L. Vu-Quoc. Finite difference calculus invariant structure of a class of algorithms for the nonlinear Klein–Gordon equation. *SIAM Journal on Numerical Analysis*, 32(6):1839–1875, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Liniger:1970:EIM

[LW70] Werner Liniger and Ralph A. Willoughby. Efficient integration methods for stiff systems of ordinary differential equations. *SIAM Journal on Numerical Analysis*, 7(1):47–66, March 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Laquer:1981:BMQ

[LW81] H. Turner Laquer and Burton Wendroff. Bounds for the model quench front. *SIAM Journal on Numerical Analysis*, 18(2):225–241, April 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1992:NHS

[LW92] T. Y. Li and Xiao Shen Wang. Nonlinear homotopies for solving deficient polynomial systems with parameters. *SIAM Journal on Numerical Analysis*, 29(4):1104–1118, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Liska:1998:CSC

[LW98] Richard Liska and Burton Wendroff. Composite schemes for conservation laws. *SIAM Journal on Numerical Analysis*, 35(6):2250–2271, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31097`.

Lyness:1967:CFC

[Lyn67] J. N. Lyness. The calculation of Fourier coefficients. *SIAM Journal on Numerical Analysis*, 4(2):301–315, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lyness:1978:QSPa

[Lyn78a] J. N. Lyness. Quadrature over a simplex: Part 1. A representation for the integrand function. *SIAM Journal on Numerical Analysis*, 15(1):122–133, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lyness:1978:QSPb

[Lyn78b] J. N. Lyness. Quadrature over a simplex: Part 2. A representation for the error functional. *SIAM Journal on Numerical Analysis*, 15(5):870–887, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lorentz:1971:BI

[LZ71] G. G. Lorentz and K. L. Zeller. Birkhoff interpolation. *SIAM Journal on Numerical Analysis*, 8(1):43–48, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Li:1992:SEP

[LZC92] T. Y. Li, Zhong Gang Zeng, and Luan Cong. Solving eigenvalue problems of real nonsymmetric matrices with real homotopies. *SIAM Journal on Numerical Analysis*, 29(1):229–248, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Marchuk:1981:KEV

[MA81] G. I. Marchuk and V. I. Agoshkov. Kinetic equations and variational principles. *SIAM Journal on Numerical Analysis*, 18(2):242–261, April 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ma:1995:NCC

[Ma95] Fu Ming Ma. Numerical calculation of center manifolds for a class of infinite-dimensional systems with applications. *SIAM Journal on Numerical Analysis*, 32(3):952–968, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ma:1998:CLSa

[Ma98a] Heping Ma. Chebyshev–Legendre spectral viscosity method for nonlinear conservation laws. *SIAM Journal on Numerical Analysis*, 35(3):869–892, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29390`.

Ma:1998:CLSb

[Ma98b] Heping Ma. Chebyshev–Legendre super spectral viscosity method for nonlinear conservation laws. *SIAM Journal on Numerical Analysis*, 35(3):893–908, June 1998.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/29391.

Madsen:1971:PCT

[Mad71] N. K. Madsen. Pointwise convergence of the three-dimensional discrete ordinate method. *SIAM Journal on Numerical Analysis*, 8 (2):266–269, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Madsen:1975:CCD

[Mad75] Niel K. Madsen. Convergent centered difference schemes for the discrete ordinate neutron transport equations. *SIAM Journal on Numerical Analysis*, 12(2): 164–176, April 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Maeztu:1982:DDA

[Mae82] J. I. Maeztu. Divided differences associated with reversible systems in $\mathbf{R}^2$. *SIAM Journal on Numerical Analysis*, 19(5):1032–1040, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mahar:1982:DAL

[Mah82a] T. J. Mahar. Discrete almost-linear oscillators. *SIAM Journal on Numerical Analysis*, 19 (2):237–244, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mahar:1982:DCO

[Mah82b] T. J. Mahar. Discrete conservative oscillators: Periodic and asymptotically periodic solutions. *SIAM Journal on Numerical Analysis*, 19 (2):231–236, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Majda:1984:FTS

[Maj84] George Majda. Filtering techniques for systems of stiff ordinary differential equations. I. *SIAM Journal on Numerical Analysis*, 21(3): 535–566, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Majda:1985:FTS

[Maj85] George Majda. Filtering techniques for systems of stiff ordinary differential equations. II. error estimates. *SIAM Journal on Numerical Analysis*, 22(6):1116–1134, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Malcolm:1977:CNS

[Mal77] Michael A. Malcolm. On the computation of nonlinear spline functions. *SIAM Journal on Numerical Analysis*, 14

(2):254–282, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Maliassov:1998:TLP

[Mal98] Serguei Maliassov. A two-level preconditioner for Schrödinger-type singular elliptic operator. *SIAM Journal on Numerical Analysis*, 35 (1):217–229, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27505`.

Mansfield:1971:OAL

[Man71] Lois E. Mansfield. On the optimal approximation of linear functionals in spaces of bivariate functions. *SIAM Journal on Numerical Analysis*, 8(1): 115–126, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mansfield:1978:ABF

[Man78] Lois Mansfield. Approximation of the boundary in the finite element solution of fourth order problems. *SIAM Journal on Numerical Analysis*, 15 (3):568–579, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mansfield:1980:SNF

[Man80] Lois Mansfield. On the solution of nonlinear finite element systems. *SIAM Journal on Numerical Analysis*, 17 (6):752–765, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mangasarian:1981:ISL

[Man81] O. L. Mangasarian. Iterative solution of linear programs. *SIAM Journal on Numerical Analysis*, 18(4):606–614, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Manteuffel:1982:OPL

[Man82] T. A. Manteuffel. Optimal parameters for linear second-degree stationary iterative methods. *SIAM Journal on Numerical Analysis*, 19(4): 833–839, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mansfield:1990:CGS

[Man90] Lois Mansfield. On the conjugate gradient solution of the Schur complement system obtained from domain decomposition. *SIAM Journal on Numerical Analysis*, 27(6):1612–1620, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mao:1995:STT

[Mao95] De Kang Mao. A shock tracking technique based on conservation in one space dimension. *SIAM Journal on Numerical Analysis*, 32(5):1677–1703, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Marden:1966:GTB

[Mar66] Morris Marden. A generalization of a theorem of bocher. *SIAM Journal on Numerical Analysis*, 3(2):269–275, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Marti:1978:ACM

[Mar78] J. T. Marti. An algorithm for computing minimum norm solutions of Fredholm integral equations of the first kind. *SIAM Journal on Numerical Analysis*, 15(6):1071–1076, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See remarks [HL82].

Martinez:1979:GMB

[Mar79a] José Mario Martínez. Generalization of the methods of Brent and Brown for solving nonlinear simultaneous equations. *SIAM Journal on Numerical Analysis*, 16(3): 434–448, June 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Marwil:1979:CRS

[Mar79b] Earl Marwil. Convergence results for Schubert's method for solving sparse nonlinear equations. *SIAM Journal on Numerical Analysis*, 16(4): 588–604, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Marti:1983:ELC

[Mar83] J. T. Marti. Evaluation of the least constant in Sobolev's inequality for $H^1(0, s)$. *SIAM Journal on Numerical Analysis*, 20(6):1239–1242, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Marini:1985:IME

[Mar85] Luisa Donatella Marini. An inexpensive method for the evaluation of the solution of the lowest order Raviart–Thomas mixed method. *SIAM Journal on Numerical Analysis*, 22(3):493–496, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Lopez-Marcos:1990:DSN

[Mar90a] J. C. López Marcos. A difference scheme for a nonlinear partial integrodifferential equation. *SIAM Journal on Numerical Analysis*, 27(1): 20–31, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Martinez:1990:FQN

[Mar90b] José Mario Martínez. A family of quasi-Newton methods for nonlinear equations with direct secant updates of matrix factorizations. *SIAM Journal on Numerical Analysis*, 27(4):1034–1049, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Martinez:1992:FPQ

[Mar92] José Mario Martínez. Fixed-point quasi-Newton methods. *SIAM Journal on Numerical Analysis*, 29(5):1413–1434, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Martinez:1994:SSM

[Mar94] José Mario Martínez. SOR-Secant methods. *SIAM Journal on Numerical Analysis*, 31 (1):217–226, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mason:1973:SMN

[Mas73] J. C. Mason. Some methods of near-minimax approximation using Laguerre polynomials. *SIAM Journal on Numerical Analysis*, 10(3):470–477, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mascagni:1990:BEM

[Mas90] Michael Mascagni. The backward Euler method for numerical solution of the Hodgkin–Huxley equations of nerve conduction. *SIAM Journal on Numerical Analysis*, 27(4):941–962, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Matthews:1972:AOB

[Mat72] J. W. Matthews. An algorithm for obtaining best approximations on sets of positive polynomials. *SIAM Journal on Numerical Analysis*, 9 (4):734–742, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mattheij:1982:CLB

[Mat82] R. M. M. Mattheij. The conditioning of linear boundary value problems. *SIAM Journal on Numerical Analysis*, 19(5):963–978, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mathew:1998:UCS

[Mat98] T. P. Mathew. Uniform convergence of the Schwarz alternating method for solving singularly perturbed advection-diffusion equations. *SIAM Journal on Numerical Analysis*, 35(4):1663–1683, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/29648.

Mayo:1984:FSP

[May84] Anita Mayo. The fast solution of Poisson's and the biharmonic equations on irregular regions. *SIAM Journal on Numerical Analysis*, 21(2): 285–299, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mayer:1987:CTI

[May87] Günter Mayer. Comparison theorems for iterative methods based on strong splittings. *SIAM Journal on Numerical Analysis*, 24(1):215–227, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Makridakis:1997:SDG

[MB97] Ch. G. Makridakis and I. Babuška. On the stability of the discontinuous Galerkin method for the heat equation. *SIAM Journal on Numerical Analysis*, 34 (1):389–401, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26165.

Masry:1990:TMC

[MC90] Elias Masry and Stamatis Cambanis. Trapezoidal Monte Carlo integration. *SIAM Journal on Numerical Analysis*, 27(1):225–246, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Morokoff:1993:QMC

[MC93] William J. Morokoff and Russel E. Caflisch. A quasi-Monte Carlo approach to particle simulation of the heat equation. *SIAM Journal on Numerical Analysis*, 30(6):1558–1573, December 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McAllister:1966:QUE

[McA66] G. T. McAllister. Quasilinear uniformly elliptic partial differential equations and difference equations. *SIAM Journal on Numerical Analysis*, 3 (1):13–33, March 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McCormick:1982:AIM

[McC82] S. F. McCormick. An algebraic interpretation of multigrid methods. *SIAM Journal on Numerical Analysis*, 19 (3):548–560, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McCormick:1984:MMV

[McC84] S. F. McCormick. Multigrid methods for variational problems: further results. *SIAM Journal on Numerical Analysis*, 21(2):255–263, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McCormick:1985:MMV

[McC85] S. F. McCormick. Multigrid methods for variational problems: general theory for the V-cycle. *SIAM Journal on Numerical Analysis*, 22(4): 634–643, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McCormick:1994:MAM

[McC94] Stephen F. McCormick. Multilevel adaptive methods for elliptic eigenproblems: A two-level convergence theory. *SIAM Journal on Numerical Analysis*, 31(6):1731–1745, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McKee:1979:CMM

[McK79] S. McKee. Cyclic multistep methods for solving Volterra integro-differential equations. *SIAM Journal on Numerical Analysis*, 16(1): 106–114, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McLaurin:1974:GCE

[McL74] Johnnie William McLaurin. A general coupled equation approach for solving the biharmonic boundary value problem. *SIAM Journal on Numerical Analysis*, 11(1): 14–33, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moskow:1999:FDS

[MDH+99] Shari Moskow, Vladimir Druskin, Tarek Habashy, Ping Lee, and Sofia Davydycheva. A finite difference scheme for elliptic equations with rough coefficients using a Cartesian grid nonconforming to interfaces. *SIAM Journal on Numerical Analysis*, 36(2):442–464, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31854`.

Missirlis:1981:CSG

[ME81] Nikolaos M. Missirlis and David J. Evans. On the convergence of some generalized preconditioned iterative methods. *SIAM Journal on Numerical Analysis*, 18(4): 591–596, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meany:1969:MI

[Mea69] R. K. Meany. A matrix inequality. *SIAM Journal on Numerical Analysis*, 6(1): 104–107, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meddahi:1998:OIP

[Med98] Salim Meddahi. An optimal iterative process for the Johnson–Nedelec method of coupling boundary and finite elements. *SIAM Journal on Numerical Analysis*, 35 (4):1393–1415, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30076`.

Meek:1980:ISM

[Mee80] D. Meek. The inverses of some matrices deviating slightly from a symmetric, tridiagonal, Toeplitz form. *SIAM Journal on Numerical Analysis*, 17(1):39–43, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meinguet:1983:REA

[Mei83] Jean Meinguet. Refined error analyses of Cholesky factorization. *SIAM Journal on Numerical Analysis*, 20(6):1243–1250, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Melhem:1987:DSS

[Mel87] Rami Melhem. Determination of stripe structures for finite element matrices. *SIAM Journal on Numerical Analysis*, 24(6):1419–1433, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Merkes:1966:TEC

[Mer66] E. P. Merkes. On truncation errors for continued fraction computations. *SIAM Journal on Numerical Analysis*, 3 (3):486–496, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meth:1994:SNB

[Met94] Kalman Z. Meth. Stable numerical boundary conditions for Stokes equations. *SIAM Journal on Numerical Analysis*, 31(5):1336–1351, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meyer:1968:SNE

[Mey68] Gunter H. Meyer. On solving nonlinear equations with a one-parameter operator imbedding. *SIAM Journal on Numerical Analysis*, 5 (4):739–752, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meyer:1971:NMT

[Mey71] Gunter H. Meyer. A numerical method for two-phase Stefan problems. *SIAM Journal on Numerical Analysis*, 8 (3):555–568, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meyer:1973:MSP

[Mey73a] Gunter H. Meyer. Multidimensional Stefan problems. *SIAM Journal on Numerical Analysis*, 10(3):522–538, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meyer:1973:NSN

[Mey73b] H. D. Meyer. The numerical solution of nonlinear parabolic problems by variational methods. *SIAM Journal on Numerical Analysis*, 10 (4):700–722, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meyer:1976:CAR

[Mey76] R. R. Meyer. On the convergence of algorithms with restart. *SIAM Journal on Numerical Analysis*, 13(5):696–704, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meyer:1981:AML

[Mey81a] Gunter H. Meyer. An analysis of the method of lines for the Reynolds equation in hydrodynamic lubrication. *SIAM Journal on Numerical Analysis*, 18(1):165–177, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meyer:1981:MLI

[Mey81b] Gunter H. Meyer. The method of lines and invariant imbedding for elliptic and parabolic free boundary problems. *SIAM Journal on Numerical Analysis*, 18(1):150–164, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meyer:1987:COM

[Mey87a] Gunter H. Meyer. Continuous orthonormalization for multipoint problems for linear ordinary differential equations. *SIAM Journal on Numerical Analysis*, 24(6):1288–1300, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meyling:1987:ACC

[Mey87b] R. H. J. Gmelig Meyling. An algorithm for constructing configurations of knots for bivariate B-splines. *SIAM Journal on Numerical Analysis*, 24(3):706–724, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moore:1990:LRF

[MF90] Peter K. Moore and Joseph E. Flaherty. A local refinement finite-element method for one-dimensional parabolic systems. *SIAM Journal on Numerical Analysis*, 27(6): 1422–1444, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Martin:1997:MNM

[MF97] Pablo Martín and José M. Ferrándiz. Multistep numerical methods based on the scheifele G-functions with application to satellite dynamics. *SIAM Journal on Numerical Analysis*, 34 (1):359–375, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26505`.

Martin:1998:IOS

[MF98] Pablo Martín and José M. Farto. Increasing the order of the SMF method for a special type of problem. *SIAM Journal on Numerical Analysis*, 35(2):773–777, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30693`.

Miller:1966:NIL

[MG66] Max K. Miller and W. T. Guy, Jr. Numerical inversion of the Laplace transform by use of Jacobi polynomials. *SIAM Journal on Numerical Analysis*, 3(4):624–635, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Marcus:1972:AEC

[MG72] Marvin Marcus and William R. Gordon. An analysis of equality in certain matrix inequalities. II. *SIAM Journal on Numerical Analysis*, 9(1): 130–136, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Molchanov:1982:DME

[MG82] I. N. Molchanov and Ē. F. Galba. Difference methods for elliptic partial differential equations with nonunique solutions. *SIAM Journal on Numerical Analysis*, 19(3): 531–547, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mas-Gallic:1995:PAL

[MG95] S. Mas-Gallic. Particle approximation of a linear convection-diffusion problem with Neumann boundary conditions. *SIAM Journal on Numerical Analysis*, 32(4):1098–1125, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mu:1998:ACN

[MH98] Mo Mu and Yunqing Huang. An alternating Crank–Nicolson method for decoupling the Ginzburg–Landau equations. *SIAM Journal on Numerical Analysis*, 35(5):1740–1761, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30309`.

Midgley:1966:CSS

[Mid66] J. E. Midgley. Calculation of subdominant solutions of linear differential equations. *SIAM Journal on Numerical Analysis*, 3(1):56–66, March 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miel:1981:ECL

[Mie81] George J. Miel. Evaluation of complex logarithms and related functions. *SIAM Journal on Numerical Analysis*, 18(4):744–750, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miel:1986:GCM

[Mie86] George Miel. On the Galerkin and collocation methods for a Cauchy singular integral equation. *SIAM Journal on Numerical Analysis*, 23(1):135–143, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miller:1966:CCS

[Mil66] G. F. Miller. On the convergence of the Chebyshev series for functions possessing a singularity in the range of representation. *SIAM Journal on Numerical Analysis*, 3(3):390–409, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miller:1969:CUD

[Mil69] John J. H. Miller. The construction of unbalanced difference operators for parabolic initial boundary value problems. *SIAM Journal on Numerical Analysis*, 6(3):476–479, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miller:1976:RAD

[Mil76] Webb Miller. Roundoff analysis by direct comparison of two algorithms. *SIAM Journal on Numerical Analysis*, 13(3):382–392, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mills:1979:OEE

[Mil79a] Wendell H. Mills, Jr. Optimal error estimates for the finite element spectral approximation of noncompact operators. *SIAM Journal on Nu-

merical Analysis, 16(4):704–718, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mills:1979:RSC

[Mil79b] Wendell H. Mills, Jr. The resolvent stability condition for spectra convergence with application to the finite element approximation of noncompact operators. *SIAM Journal on Numerical Analysis*, 16(4): 695–703, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Milaszewicz:1981:CSR

[Mil81a] J. P. Milaszewicz. On criticality and the Stein–Rosenberg theorem. *SIAM Journal on Numerical Analysis*, 18(3): 559–564, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miller:1981:MFEb

[Mil81b] Keith Miller. Moving finite elements. II. *SIAM Journal on Numerical Analysis*, 18(6): 1033–1057, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miller:1992:MMS

[Mil92] Keith Miller. On the mass matrix spectrum bounds of wathen and the local moving finite elements of baines. *SIAM Journal on Numerical Analysis*, 29(1):89–106, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miller:1997:GMI

[Mil97] Keith Miller. A geometrical-mechanical interpretation of gradient-weighted moving finite elements. *SIAM Journal on Numerical Analysis*, 34(1):67–90, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26088`.

Minc:1970:MEP

[Min70] Henryk Minc. On the maximal eigenvector of a positive matrix. *SIAM Journal on Numerical Analysis*, 7 (3):424–427, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miranker:1971:GAO

[Mir71] W. L. Miranker. Galerkin approximations and the optimization of difference schemes for boundary value problems. *SIAM Journal on Numerical Analysis*, 8(3):486–496, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mittelmann:1977:PEF

[Mit77] H. D. Mittelmann. On pointwise estimates for a finite element solution of nonlinear boundary value problems. *SIAM Journal on Numerical Analysis*, 14(4):773–778, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mittelmann:1986:PAC

[Mit86] Hans D. Mittelmann. A pseudo-arclength continuation method for nonlinear eigenvalue problems. *SIAM Journal on Numerical Analysis*, 23(5):1007–1016, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mittelmann:1987:CVI

[Mit87] H. D. Mittelmann. On continuation for variational inequalities. *SIAM Journal on Numerical Analysis*, 24(6):1374–1381, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mathon:1977:ASE

[MJ77a] Rudolf Mathon and R. L. Johnston. The approximate solution of elliptic boundary-value problems by fundamental solutions. *SIAM Journal on Numerical Analysis*, 14 (4):638–650, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moore:1977:SSR

[MJ77b] R. E. Moore and S. T. Jones. Safe starting regions for iterative methods. *SIAM Journal on Numerical Analysis*, 14(6): 1051–1065, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moore:1980:STA

[MK80] R. E. Moore and J. B. Kioustelidis. A simple test for accuracy of approximate solutions to nonlinear (or linear) systems. *SIAM Journal on Numerical Analysis*, 17(4): 521–529, August 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Maday:1993:LPV

[MKT93] Yvon Maday, Sidi M. Ould Kaber, and Eitan Tadmor. Legendre pseudospectral viscosity method for nonlinear conservation laws. *SIAM Journal on Numerical Analysis*, 30(2):321–342, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Minerbo:1969:IAI

[ML69] Gerald N. Minerbo and Maurice E. Levy. Inversion of Abel's integral equation by means of orthogonal polynomials. *SIAM Journal on Nu-*

merical Analysis, 6(4):598–616, December 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Morlet:1992:NSF

[ML92] Anne C. Morlet and Jens Lorenz. Numerical solution of a functional equation on a circle. *SIAM Journal on Numerical Analysis*, 29(6):1741–1768, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Micchelli:1973:ODS

[MM73] C. A. Micchelli and W. L. Miranker. Optimal difference schemes for linear initial value problems. *SIAM Journal on Numerical Analysis*, 10(6):983–1009, December 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Melkman:1979:OEL

[MM79] Avraham A. Melkman and Charles A. Micchelli. Optimal estimation of linear operators in Hilbert spaces from inaccurate data. *SIAM Journal on Numerical Analysis*, 16(1):87–105, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miller:1981:MFEa

[MM81] Keith Miller and Robert N. Miller. Moving finite elements. I. *SIAM Journal on Numerical Analysis*, 18(6):1019–1032, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Maitre:1984:MMC

[MM84] Jean-François Maitre and François Musy. Multigrid methods: convergence theory in a variational framework. *SIAM Journal on Numerical Analysis*, 21(4):657–671, August 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Martinez:1994:SMO

[MMD94] V. Martínez, A. Marquina, and R. Donat. Shooting methods for one-dimensional diffusion-absorption problems. *SIAM Journal on Numerical Analysis*, 31(2):572–589, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mandel:1988:ATM

[MMR88] Jan Mandel, Steve F. McCormick, and John W. Ruge. An algebraic theory for multigrid methods for variational problems. *SIAM Journal on Numerical Analysis*, 25(1):91–110, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meek:1984:NMB

[MN84] Peter C. Meek and John Norbury. Nonlinear moving boundary problems and a Keller box scheme. *SIAM Journal on Numerical Analysis*, 21(5):883–893, October 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mandel:1987:CFE

[MN87] Jan Mandel and Jindřich Nečas. Convergence of finite elements for transonic potential flows. *SIAM Journal on Numerical Analysis*, 24(5): 985–996, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Manteuffel:1993:OEP

[MO93] Thomas Manteuffel and James Otto. Optimal equivalent preconditioners. *SIAM Journal on Numerical Analysis*, 30(3): 790–812, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Monk:1986:EEN

[Mon86] Peter Monk. Error estimates for a numerical method for an ill-posed Cauchy problem for the heat equation. *SIAM Journal on Numerical Analysis*, 23(6):1155–1172, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Monk:1987:MFE

[Mon87] Peter Monk. A mixed finite element method for the biharmonic equation. *SIAM Journal on Numerical Analysis*, 24(4):737–749, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Monk:1991:MMA

[Mon91] Peter B. Monk. A mixed method for approximating Maxwell's equations. *SIAM Journal on Numerical Analysis*, 28(6):1610–1634, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Monk:1992:AFE

[Mon92] Peter Monk. Analysis of a finite element method for Maxwell's equations. *SIAM Journal on Numerical Analysis*, 29(3):714–729, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moore:1977:TES

[Moo77] R. E. Moore. A test for existence of solutions to nonlinear systems. *SIAM Journal on Numerical Analysis*, 14 (4):611–615, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moore:1978:CTC

[Moo78] R. E. Moore. A computational test for convergence of iterative methods for nonlinear systems. *SIAM Journal on Numerical Analysis*, 15(6): 1194–1196, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moore:1994:PEE

[Moo94] Peter K. Moore. *A Posteriori* error estimation with finite element semi- and fully-discrete methods for nonlinear parabolic equations in one space dimension. *SIAM Journal on Numerical Analysis*, 31(1):149–169, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moore:1996:CPI

[Moo96] Gerald Moore. Computation and parametrisation of invariant curves and tori. *SIAM Journal on Numerical Analysis*, 33(6):2333–2358, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26288`.

Moore:1999:FDM

[Moo99] Peter K. Moore. Finite difference methods and spatial A posteriori error estimates for solving parabolic equations in three space dimensions on grids with irregular nodes. *SIAM Journal on Numerical Analysis*, 36 (4):1044–1064, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32207`.

Morrison:1968:OLS

[Mor68] David D. Morrison. Optimization by least squares. *SIAM Journal on Numerical Analysis*, 5(1):83–88, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

More:1971:GCN

[Mor71] Jorge J. More. Global convergence of Newton–Gauss–Seidel methods. *SIAM Journal on Numerical Analysis*, 8 (2):325–336, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

More:1972:NGM

[Mor72] Jorge J. More. Nonlinear generalizations of matrix diagonal dominance with application to Gauss–Seidel iterations. *SIAM Journal on Numerical Analysis*, 9(2): 357–378, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Morlet:1995:CSM

[Mor95] Anne C. Morlet. Convergence of the sinc method for a fourth-order ordinary differential equation with an application. *SIAM Journal on Numerical Analysis*, 32(5):1475–1503, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moret:1997:NSC

[Mor97] Igor Moret. A note on the superlinear convergence of GMRES. *SIAM Journal on Numerical Analysis*, 34(2):513–516, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25979`.

Morton:1998:AFV

[Mor98] K. W. Morton. On the analysis of finite volume methods for evolutionary problems. *SIAM Journal on Numerical Analysis*, 35(6):2195–2222, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31696`.

Moss:1983:TDO

[Mos83] William F. Moss. The two-dimensional oscillating airfoil: a new implementation of the Galerkin method. *SIAM Journal on Numerical Analysis*, 20(2):391–399, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Motzkin:1966:ASD

[Mot66] Theodore S. Motzkin. Approximation in the sense of a deviator integral. *SIAM Journal on Numerical Analysis*, 3(2):276–286, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moursund:1965:SCA

[Mou65] D. G. Moursund. Some computational aspects of the uniform approximation of a function and its derivative. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(3):464–472, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Moursund:1966:CAU

[Mou66] David G. Moursund. Chebyshev approximation using a generalized weight function. *SIAM Journal on Numerical Analysis*, 3(3):435–450, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moursund:1968:CAC

[Mou68] D. G. Moursund. Computational aspects of Chebyshev approximation using a generalized weight function. *SIAM Journal on Numerical Analysis*, 5(1):126–137, March 1968. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Moler:1968:BEE

[MP68] C. B. Moler and L. E. Payne. Bounds for eigenvalues and eigenvectors of symmetric operators. *SIAM Journal on Numerical Analysis*, 5(1): 64–70, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meyer:1977:CPM

[MP77] Carl D. Meyer, Jr. and R. J. Plemmons. Convergent powers of a matrix with applications to iterative methods for singular linear systems. *SIAM Journal on Numerical Analysis*, 14(4):699–705, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Morrow:1978:CAC

[MP78a] C. R. Morrow and T. N. L. Patterson. Construction of algebraic cubature rules using polynomial ideal theory. *SIAM Journal on Numerical Analysis*, 15(5):953–976, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mukai:1978:UAA

[MP78b] H. Mukai and E. Polak. On the use of approximations in algorithms for optimization problems with equality and inequality constraints. *SIAM Journal on Numerical Analysis*, 15(4):674–693, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Morrow:1985:CAC

[MP85] C. R. Morrow and T. N. L. Patterson. The construction of algebraic cubature formulae by the distribution of nodes along selected lines. *SIAM Journal on Numerical Analysis*, 22(6):1178–1190, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Manteuffel:1990:PBC

[MP90] Thomas A. Manteuffel and Seymour V. Parter. Preconditioning and boundary conditions. *SIAM Journal on Numerical Analysis*, 27(3): 656–694, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Milstein:1998:BIM

[MPS98] G. N. Milstein, E. Platen, and H. Schurz. Balanced implicit methods for stiff stochastic systems. *SIAM Journal on Numerical Analysis*, 35(3):1010–1019, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27352`.

Maday:1982:SPS

[MQ82a] Y. Maday and A. Quarteroni. Spectral and pseudo-spectral approximations of the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 19(4):761–780, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moore:1982:SIT

[MQ82b] R. E. Moore and L. Qi. A successive interval test for nonlinear systems. *SIAM Journal on Numerical Analysis*, 19(4): 845–850, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McLachlan:1998:NIP

[MQT98] R. I. McLachlan, G. R. W. Quispel, and G. S. Turner. Numerical integrators that preserve symmetries and reversing symmetries. *SIAM Journal on Numerical Analysis*, 35(2):586–599, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29580`.

Mantel:1977:AIP

[MR77] Francis Mantel and Philip Rabinowitz. The application of integer programming to the computation of fully symmetric integration formulas in two and three dimensions. *SIAM Journal on Numerical Analysis*, 14(3):391–425, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McCormick:1982:MMV

[MR82] S. F. McCormick and J. W. Ruge. Multigrid methods for variational problems. *SIAM Journal on Numerical Analysis*, 19(5):924–929, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Markowich:1983:NSC

[MR83] Peter Markowich and Michael Renardy. The numerical solution of a class of quasilinear parabolic Volterra equations arising in polymer rheology. *SIAM Journal on Numerical Analysis*, 20(5):890–908, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Markowich:1984:LWM

[MR84] Peter Markowich and Michael Renardy. Lax–Wendroff methods for hyperbolic history value problems. *SIAM Journal on Numerical Analysis*, 21(1):24–51, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See corrigenda [MR85].

Markowich:1985:CLW

[MR85] Peter Markowich and Michael Renardy. Corrigenda: "Lax–Wendroff Methods for Hyperbolic History Value Problems" [SIAM J. Numer. Anal. **21** (1984), no. 1, 24–51]. *SIAM Journal on Numerical Analysis*, 22(1):204, February 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [MR84].

Manteuffel:1998:LSF

[MR98] Thomas A. Manteuffel and Klaus J. Ressel. Least-squares finite-element solution of the neutron transport equation in diffusive regimes. *SIAM Journal on Numerical Analysis*, 35(2):806–835, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29970`.

Ma:1996:GGQ

[MRW96] J. Ma, V. Rokhlin, and S. Wandzura. Generalized Gaussian quadrature rules for systems of arbitrary functions. *SIAM Journal on Numerical Analysis*, 33(3):971–996, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meir:1965:MRQ

[MS65a] A. Meir and A. Sharma. On the method of Romberg quadrature. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2):250–258, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Morton:1965:SFD

[MS65b] K. W. Morton and S. Schechter. On the stability of finite difference matrices. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):119–128, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Moursund:1965:BCA

[MS65c] D. G. Moursund and A. H. Stroud. The best çebyšev approximation to a function and its derivative on $n + 2$ points. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):15–23, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Meir:1966:SAF

[MS66] A. Meir and A. Sharma. Simultaneous approximation of a function and its derivatives. *SIAM Journal on Numerical Analysis*, 3(4):553–563, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meir:1968:EOF

[MS68] A. Meir and A. Sharma. An extension of Obreshkov's formula. *SIAM Journal on Numerical Analysis*, 5(3):488–490, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mangasarian:1973:BSF

[MS73a] O. L. Mangasarian and L. L. Schumaker. Best summation formulae and discrete splines. *SIAM Journal on Numerical Analysis*, 10(3):448–459, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McCarthy:1973:OCM

[MS73b] Charles McCarthy and Gilbert Strang. Optimal conditioning of matrices. *SIAM Journal on Numerical Analysis*, 10 (2):370–388, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meir:1973:LIS

[MS73c] A. Meir and A. Sharma. Lacunary interpolation by splines. *SIAM Journal on Numerical Analysis*, 10(3):433–442, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moler:1973:AGM

[MS73d] C. B. Moler and G. W. Stewart. An algorithm for generalized matrix eigenvalue problems. *SIAM Journal on Numerical Analysis*, 10(2): 241–256, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McCormick:1976:UEE

[MS76] G. F. McCormick and V. A. Sposito. Using the L_2-estimator in L_1-estimation. *SIAM Journal on Numerical Analysis*, 13(3):337–343, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moore:1980:CTP

[MS80] G. Moore and A. Spence. The calculation of turning points of nonlinear equations. *SIAM Journal on Numerical Analysis*, 17(4):567–576, August 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McKee:1983:PIM

[MS83] S. McKee and A. Stokes. Product integration methods for the nonlinear Basset equation. *SIAM Journal on Numerical Analysis*, 20(1):143–160, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Meyer:1988:DPE

[MS88] Carl D. Meyer and G. W. Stewart. Derivatives and perturbations of eigenvectors.

SIAM Journal on Numerical Analysis, 25(3):679–691, June 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

MartinezGamba:1989:STB

[MS89] Irene Martínez Gamba and Maria Cristina J. Squeff. Simulation of the transient behavior of a one-dimensional semiconductor device. II. *SIAM Journal on Numerical Analysis*, 26(3):539–552, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Mehrotra:1991:MAC

[MS91] Sanjay Mehrotra and Jie Sun. A method of analytic centers for quadratically constrained convex quadratic programs. *SIAM Journal on Numerical Analysis*, 28(2):529–544, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Monk:1994:CAY

[MS94] Peter Monk and Endre Süli. A convergence analysis of Yee's scheme on nonuniform grids. *SIAM Journal on Numerical Analysis*, 31(2):393–412, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Monegato:1997:NSG

[MS97a] G. Monegato and I. H. Sloan. Numerical solution of the generalized airfoil equation for an airfoil with a flap. *SIAM Journal on Numerical Analysis*, 34(6):2288–2305, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29505`.

Munoz-Sola:1997:PLT

[MS97b] Rafael Muñoz-Sola. Polynomial liftings on a tetrahedron and applications to the *h-p* version of the finite element method in three dimensions. *SIAM Journal on Numerical Analysis*, 34(1):282–314, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26755`.

Melenk:1998:FRD

[MS98] J. M. Melenk and C. Schwab. *hp* FEM for reaction-diffusion equations I: Robust exponential convergence. *SIAM Journal on Numerical Analysis*, 35(4):1520–1557, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31760`.

Meir:1999:ANA

[MS99a] A. J. Meir and Paul G. Schmidt. Analysis and numerical approximation of a stationary MHD flow problem with nonideal boundary. *SIAM Journal on Numerical Analysis*, 36(4):1304–1332, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32615`.

Monk:1999:ACF

[MS99b] Peter Monk and Endre Süli. The adaptive computation of far-field patterns by *A Posteriori* error estimation of linear functionals. *SIAM Journal on Numerical Analysis*, 36(1):251–274, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31517`.

Mund:1999:ATL

[MS99c] Patrick Mund and Ernst P. Stephan. An adaptive two-level method for the coupling of nonlinear FEM-BEM equations. *SIAM Journal on Numerical Analysis*, 36(4):1001–1021, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31649`.

Manohar:1988:NNT

[MST88] R. Manohar, J. W. Stephenson, and G. M. Trojan. Nine-node triangular cubic elements. *SIAM Journal on Numerical Analysis*, 25(6):1432–1441, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Manteuffel:1994:DSV

[MSW94] Thomas A. Manteuffel, Michael Steuerwalt, and Burton Wendroff. Dedication to Seymour V. Parter on the occasion of his 65th birthday. *SIAM Journal on Numerical Analysis*, 31(6):vii–ix, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Morgan:1995:PDB

[MSW95] Alexander P. Morgan, Andrew J. Sommese, and Charles W. Wampler. A product-decomposition bound for Bezout numbers. *SIAM Journal on Numerical Analysis*, 32(4):1308–1325, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moursund:1968:OSV

[MT68a] D. G. Moursund and G. D. Taylor. Optimal starting values for the Newton–Raphson calculation of inverses of certain functions. *SIAM Journal on Numerical Analysis*, 5(1):

138–150, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Moursund:1968:URA

[MT68b] D. G. Moursund and G. D. Taylor. Uniform rational approximation using a generalized weight function. *SIAM Journal on Numerical Analysis*, 5(4):882–889, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

McCarthy:1975:CPE

[MT75] Mary Anne McCarthy and R. A. Tapia. Computable a posteriori L_∞-error bounds for the approximate solution of two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 12 (6):919–937, December 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Maday:1989:ASV

[MT89a] Yvon Maday and Eitan Tadmor. Analysis of the spectral vanishing viscosity method for periodic conservation laws. *SIAM Journal on Numerical Analysis*, 26(4): 854–870, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Marion:1989:NGM

[MT89b] Martine Marion and Roger Temam. Nonlinear Galerkin methods. *SIAM Journal on Numerical Analysis*, 26 (5):1139–1157, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Milstein:1997:NMW

[MT97] G. N. Milstein and M. V. Tret′yakov. Numerical methods in the weak sense for stochastic differential equations with small noise. *SIAM Journal on Numerical Analysis*, 34(6):2142–2167, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27896`.

Mandel:1999:SSM

[MTF99] Jan Mandel, Radek Tezaur, and Charbel Farhat. A scalable substructuring method by Lagrange multipliers for plate bending problems. *SIAM Journal on Numerical Analysis*, 36(5):1370–1391, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28989`.

Murad:1996:ABS

[MTL96] Márcio A. Murad, Vidar Thomée, and Abimael F. D.

Loula. Asymptotic behavior of semidiscrete finite-element approximations of biot's consolidation problem. *SIAM Journal on Numerical Analysis*, 33(3):1065–1083, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miller:1999:REC

[MTTW99] Gary L. Miller, Dafna Talmor, Shang-Hua Teng, and Noel Walkington. On the radius-edge condition in the control volume method. *SIAM Journal on Numerical Analysis*, 36(6):1690–1708, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31185`.

Muller:1984:CHM

[Mül84] Rolf E. Müller. Computations of holomorphic multiparameter eigenvalue problems. *SIAM Journal on Numerical Analysis*, 21(2): 373–387, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Munteanu:1973:GSS

[Mun73] Marie-Jeanne Munteanu. Generalized smoothing spline functions for operators. *SIAM Journal on Numerical Analysis*, 10(1):28–34, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Munz:1994:GTS

[Mun94] C. D. Munz. On Godunov-type schemes for Lagrangian gas dynamics. *SIAM Journal on Numerical Analysis*, 31(1): 17–42, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Murty:1971:BAC

[Mur71] V. N. Murty. Best approximation with Chebyshev polynomials. *SIAM Journal on Numerical Analysis*, 8(4):717–721, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Murota:1982:GCM

[Mur82] Kazuo Murota. Global convergence of a modified Newton iteration for algebraic equations. *SIAM Journal on Numerical Analysis*, 19(4): 793–799, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Murua:1997:OCP

[Mur97] Ander Murua. On order conditions for partitioned symplectic methods. *SIAM Journal on Numerical Analysis*, 34(6):2204–2211, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170

(electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28516.

Monk:1999:EEN

[MV99] P. B. Monk and O. Vacus. Error estimates for a numerical scheme for ferromagnetic problems. *SIAM Journal on Numerical Analysis*, 36(3):696–718, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/32422.

Magenes:1989:TNR

[MVV89] E. Magenes, C. Verdi, and A. Visintin. Theoretical and numerical results on the two-phase Stefan problem. *SIAM Journal on Numerical Analysis*, 26(6):1425–1438, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Manteuffel:1986:ENS

[MW86] Thomas A. Manteuffel and Andrew B. White, Jr. On the efficient numerical solution of systems of second order boundary value problems. *SIAM Journal on Numerical Analysis*, 23(5):996–1006, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Manteuffel:1992:CDS

[MW92] Thomas A. Manteuffel and Andrew B. White, Jr. A calculus of difference schemes for the solution of boundary-value problems on irregular meshes. *SIAM Journal on Numerical Analysis*, 29(5):1321–1346, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Miller:1994:TMF

[MW94] J. J. H. Miller and S. Wang. A tetrahedral mixed finite element method for the stationary semiconductor continuity equations. *SIAM Journal on Numerical Analysis*, 31(1):196–216, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ma:1995:ANO

[MW95] Ling Ma and Noel J. Walkington. On algorithms for nonconvex optimization in the calculus of variations. *SIAM Journal on Numerical Analysis*, 32(3):900–923, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Marion:1995:EEN

[MX95] Martine Marion and Jinchao Xu. Error estimates on a new nonlinear Galerkin method based on two-grid finite elements. *SIAM Journal on Nu-*

merical Analysis, 32(4):1170–1184, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Myerson:1991:IS

[Mye91] G. Myerson. On ignoring the singularity. *SIAM Journal on Numerical Analysis*, 28(6):1803–1807, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Naevdal:1991:CPT

[Næv91] Geir Nævdal. A comment on Parrott's theorem. *SIAM Journal on Numerical Analysis*, 28(5):1517–1522, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nakashima:1991:EPR

[Nak91] Masaharu Nakashima. Embedded pseudo-Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 28(6):1790–1802, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nanda:1985:DEA

[Nan85] T. Nanda. Differential equations and the QR algorithm. *SIAM Journal on Numerical Analysis*, 22(2):310–321, April 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nashed:1970:SDS

[Nas70] M. Z. Nashed. Steepest descent for singular linear operator equations. *SIAM Journal on Numerical Analysis*, 7(3):358–362, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nash:1984:NTM

[Nas84] Stephen G. Nash. Newton-type minimization via the Lánczos method. *SIAM Journal on Numerical Analysis*, 21(4):770–788, August 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Navot:1965:EMF

[Nav65] I. Navot. The Euler–Maclaurin functional for functions with a complex singularity near the range of integration. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2):259–264, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Nazareth:1979:RBB

[Naz79] Larry Nazareth. A relationship between the BFGS and conjugate gradient algorithms and its implications for new algorithms. *SIAM Journal on Numerical Analysis*, 16(5):794–800, October 1979. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Nazareth:1986:ADP

[Naz86] J. L. Nazareth. Analogues of Dixon's and Powell's theorems for unconstrained minimization with inexact line searches. *SIAM Journal on Numerical Analysis*, 23(1): 170–177, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Netravali:1974:SAS

[NdF74] Arun N. Netravali and Rui J. P. de Figueiredo. Spline approximation to the solution of the linear Fredholm integral equation of the second kind. *SIAM Journal on Numerical Analysis*, 11(3):538–549, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nelson:1977:CEC

[NE77] Paul Nelson and Ira T. Elder. Calculation of eigenfunctions in the context of integration-to-blowup. *SIAM Journal on Numerical Analysis*, 14(1): 124–136, March 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Neamtu:1992:MDD

[Nea92] M. Neamtu. Multivariate divided differences I: Basic properties. *SIAM Journal on Numerical Analysis*, 29 (5):1435–1445, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nedelec:1978:CEC

[Ned78] J. C. Nedelec. Computation of eddy currents on a surface in R^3 by finite element methods. *SIAM Journal on Numerical Analysis*, 15 (3):580–594, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nelson:1973:CDO

[Nel73] Paul Nelson, Jr. Convergence of the discrete-ordinates method for anisotropically scattering multiplying particles in a subcritical slab. *SIAM Journal on Numerical Analysis*, 10(1):175–181, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nelson:1986:CII

[Nel86] Paul Nelson. Convergence of inner iterations for finite-difference approximations to the linear transport equation. *SIAM Journal on Numerical Analysis*, 23(5):1017–1022, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Neumaier:1985:RII

[Neu85] A. Neumaier. Residual inverse iteration for the nonlinear eigenvalue problem. *SIAM Journal on Numerical Analysis*, 22(5):914–923, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Neumaier:1987:OLI

[Neu87] A. Neumaier. Overestimation in linear interval equations. *SIAM Journal on Numerical Analysis*, 24(1):207–214, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Neubauer:1988:PPC

[Neu88] Andreas Neubauer. An a posteriori parameter choice for Tikhonov regularization in Hilbert scales leading to optimal convergence rates. *SIAM Journal on Numerical Analysis*, 25(6):1313–1326, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Neubauer:1997:CSR

[Neu97] Andreas Neubauer. On converse and saturation results for Tikhonov regularization of linear ill-posed problems. *SIAM Journal on Numerical Analysis*, 34(2):517–527, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25392`.

Neuss:1998:CCU

[Neu98] Nicolas Neuss. V-cycle convergence with unsymmetric smoothers and application to an anisotropic model problem. *SIAM Journal on Numerical Analysis*, 35(3):1201–1212, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31084`.

Nickel:1967:ERP

[Nic67] Karl L. E. Nickel. Extension of a recent paper by Fox, Henrici and Moler on eigenvalues of elliptic operators. *SIAM Journal on Numerical Analysis*, 4(4):483–488, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `https://www.jstor.org/stable/2949713`.

Nicolaides:1972:CFE

[Nic72] R. A. Nicolaides. On a class of finite elements generated by Lagrange interpolation. *SIAM Journal on Numerical Analysis*, 9(3):435–445, September 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nichols:1973:CTS

[Nic73a] Nancy K. Nichols. On the convergence of two-stage iterative processes for solving linear equations. *SIAM Journal on Numerical Analysis*, 10 (3):460–469, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nicolaides:1973:CFE

[Nic73b] R. A. Nicolaides. On a class of finite elements generated by Lagrange interpolation. II. *SIAM Journal on Numerical Analysis*, 10(1): 182–189, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nickel:1981:GCB

[Nic81] Karl L. Nickel. A globally convergent ball Newton method. *SIAM Journal on Numerical Analysis*, 18 (6):988–1003, December 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nicolaides:1982:EUA

[Nic82] R. A. Nicolaides. Existence, uniqueness and approximation for generalized saddle point problems. *SIAM Journal on Numerical Analysis*, 19 (2):349–357, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nicolaides:1987:DCG

[Nic87] R. A. Nicolaides. Deflation of conjugate gradients with applications to boundary value problems. *SIAM Journal on Numerical Analysis*, 24(2): 355–365, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nicolaides:1992:ACM

[Nic92a] R. A. Nicolaides. Analysis and convergence of the MAC scheme I. the linear problem. *SIAM Journal on Numerical Analysis*, 29(6):1579–1591, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nicolaides:1992:DDP

[Nic92b] R. A. Nicolaides. Direct discretization of planar div-curl problems. *SIAM Journal on Numerical Analysis*, 29(1): 32–56, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nielson:1974:MSI

[Nie74] Gregory M. Nielson. Multivariate smoothing and interpolating splines. *SIAM Journal on Numerical Analysis*, 11 (2):435–446, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Niethammer:1979:DSA

[Nie79] Wilhelm Niethammer. On different splittings and the associated iteration methods. *SIAM Journal on Numerical Analysis*, 16(2): 186–200, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nielson:1980:MNI

[Nie80] G. Nielson. Minimum norm interpolation in triangles. *SIAM Journal on Numerical Analysis*, 17(1):44–62, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nielsen:1999:FED

[Nie99] Bjørn Fredrik Nielsen. Finite element discretizations of elliptic problems in the presence of arbitrarily small ellipticity: An error analysis. *SIAM Journal on Numerical Analysis*, 36(2): 368–392, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31943`.

Nitsche:1989:FEM

[Nit89] Joachim A. Nitsche. Finite-element methods for conformal mappings. *SIAM Journal on Numerical Analysis*, 26(6): 1525–1533, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ning:1997:CSM

[NK97] S. Ning and R. B. Kearfott. A comparison of some methods for solving linear interval equations. *SIAM Journal on Numerical Analysis*, 34 (4):1289–1305, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27099`.

Nocedal:1985:PHU

[NO85] Jorge Nocedal and Michael L. Overton. Projected Hessian updating algorithms for nonlinearly constrained optimization. *SIAM Journal on Numerical Analysis*, 22(5):821–850, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Noble:1966:MCG

[Nob66] Ben Noble. A method for computing the generalized inverse of a matrix. *SIAM Journal on Numerical Analysis*, 3 (4):582–584, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Norsett:1978:RPA

[Nor78] Syvert P. Norsett. Restricted Padé approximations to the exponential function. *SIAM*

Journal on Numerical Analysis, 15(5):1008–1029, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Notaris:1991:SNF

[Not91] Sotirios E. Notaris. Some new formulae for the Stieltjes polynomials relative to classical weight functions. *SIAM Journal on Numerical Analysis*, 28(4):1196–1206, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nassif:1981:SDF

[NP81] Nabil R. Nassif and Fabrice Pini. Semi-discrete and fully discrete finite-element methods with penalty for the numerical solution of the waterhammer problem. *SIAM Journal on Numerical Analysis*, 18(1):111–128, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nochetto:1993:FDA

[NPV93] R. H. Nochetto, M. Paolini, and C. Verdi. A fully discrete adaptive nonlinear Chernoff formula. *SIAM Journal on Numerical Analysis*, 30(4):991–1014, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nickel:1972:TCN

[NR72] K. Nickel and K. Ritter. Termination criterion and numerical convergence. *SIAM Journal on Numerical Analysis*, 9(2):277–283, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nkaoua:1993:NTD

[NS93] T. N'Kaoua and R. Sentis. A new time discretization for the radiative transfer equations: Analysis and comparison with the classical discretization. *SIAM Journal on Numerical Analysis*, 30(3):733–748, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nessyahu:1992:CRA

[NT92] Haim Nessyahu and Eitan Tadmor. The convergence rate of approximate solutions for nonlinear scalar conservation laws. *SIAM Journal on Numerical Analysis*, 29(6):1505–1519, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nessyahu:1994:CRA

[NT94] Haim Nessyahu and Tamir Tassa. Convergence rate of approximate solutions to conservation laws with initial rarefactions. *SIAM Journal on Numerical Analysis*, 31(3):

628–654, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nooijen:1990:SNI

[NtB90] M. Nooijen, G. te Velde, and E. J. Baerends. Symmetric numerical integration formulas for regular polygons. *SIAM Journal on Numerical Analysis*, 27(1):198–218, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nessyahu:1994:CRG

[NTT94] Haim Nessyahu, Eitan Tadmor, and Tamir Tassa. The convergence rate of Godunov type schemes. *SIAM Journal on Numerical Analysis*, 31 (1):1–16, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nelson:1979:TPO

[NV79] Paul Nelson, Jr. and H. Dean Victory, Jr. Theoretical properties of one-dimensional discrete ordinates. *SIAM Journal on Numerical Analysis*, 16 (2):270–283, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Neta:1983:NFO

[NV83] Beny Neta and H. D. Victory, Jr. A new fourth-order finite-difference method for solving discrete-ordinates slab transport equations. *SIAM Journal on Numerical Analysis*, 20(1):94–105, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nochetto:1988:ADP

[NV88] Ricardo H. Nochetto and Claudio Verdi. Approximation of degenerate parabolic problems using numerical integration. *SIAM Journal on Numerical Analysis*, 25(4): 784–814, August 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Naik:1993:IRM

[NV93] Naomi H. Naik and John Van Rosendale. The improved robustness of multigrid elliptic solvers based on multiple semicoarsened grids. *SIAM Journal on Numerical Analysis*, 30(1):215–229, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nochetto:1997:CPS

[NV97] Ricardo H. Nochetto and Claudio Verdi. Convergence past singularities for a fully discrete approximation of curvature-driven interfaces. *SIAM Journal on Numerical Analysis*, 34(2): 490–512, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170

(electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26952.

Nedelec:1989:HPE

[NW89] J.-C. Nédélec and S. Wolf. Homogenization of the problem of eddy currents in a transformer core. *SIAM Journal on Numerical Analysis*, 26(6):1407–1424, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nicolaides:1997:CST

[NW97] Roy A. Nicolaides and Xiaonan Wu. Covolume solutions of three-dimensional div-curl equations. *SIAM Journal on Numerical Analysis*, 34(6): 2195–2203, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27728.

Obi:1990:EAL

[Obi90] Wilson C. Obi. Error analysis of a Laplace transform inversion procedure. *SIAM Journal on Numerical Analysis*, 27 (2):457–469, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osher:1984:HRS

[OC84] Stanley Osher and Sukumar Chakravarthy. High resolution schemes and the entropy condition. *SIAM Journal on Numerical Analysis*, 21(5): 955–984, October 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Oettli:1965:SSL

[Oet65] W. Oettli. On the solution set of a linear system with inaccurate coefficients. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1): 115–118, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Oliveira:1974:IAT

[Oli74] F. Aleixo Oliveira. Interval analysis and two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 11(2): 382–391, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Olson:1977:TPS

[Ols77] Andrew M. Olson. A two-point series method for two-point boundary value problems: Theoretical foundation. *SIAM Journal on Numerical Analysis*, 14(1):2–18, March 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Olver:1965:ASS

[Olv65] F. W. J. Olver. On the asymptotic solutions of second-order differential equations having an irregular singularity of rank one, with an application to Whittaker functions. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2): 225–243, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Olver:1978:NAE

[Olv78] F. W. J. Olver. A new approach to error arithmetic. *SIAM Journal on Numerical Analysis*, 15(2): 368–393, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Omodei:1977:NSR

[Omo77] Bernard J. Omodei. On the numerical stability of the Rayleigh–Ritz method. *SIAM Journal on Numerical Analysis*, 14(6):1151–1171, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Oden:1997:PDD

[OPF97] J. T. Oden, Abani Patra, and Yusheng Feng. Parallel domain decomposition solver for adaptive *hp* finite element methods. *SIAM Journal on Numerical Analysis*, 34(6): 2090–2118, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27888`.

Oettli:1965:ASL

[OPW65] W. Oettli, W. Prager, and J. H. Wilkinson. Admissible solutions of linear systems with not sharply defined coefficients. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2): 291–299, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Ortega:1966:DDO

[OR66a] James M. Ortega and Werner C. Rheinboldt. On discretization and differentiation of operators with application to Newton's method. *SIAM Journal on Numerical Analysis*, 3(1): 143–156, March 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ortega:1966:NDE

[OR66b] James M. Ortega and Maxine L. Rockoff. Nonlinear difference equations and Gauss–Seidel type iterative methods. *SIAM Journal on Numerical Analysis*, 3(3):497–513, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ortega:1967:MIN

[OR67] James M. Ortega and Werner C. Rheinboldt. Monotone iterations for nonlinear equations with application to Gauss–Seidel methods. *SIAM Journal on Numerical Analysis*, 4 (2):171–190, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ortega:1972:GCR

[OR72] James M. Ortega and Werner C. Rheinboldt. A general convergence result for unconstrained minimization methods. *SIAM Journal on Numerical Analysis*, 9(1):40–43, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Oden:1976:MFE

[OR76] J. T. Oden and J. N. Reddy. On mixed finite element approximations. *SIAM Journal on Numerical Analysis*, 13 (3):393–404, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osborne:1986:RTS

[OR86] M. R. Osborne and R. D. Russell. The Riccati transformation in the solution of boundary value problems. *SIAM Journal on Numerical Analysis*, 23(5):1023–1033, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osher:1990:FOI

[OR90] Stanley Osher and Leonid I. Rudin. Feature-oriented image enhancement using shock filters. *SIAM Journal on Numerical Analysis*, 27(4):919–940, August 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ostermann:1993:RMP

[OR93] A. Ostermann and M. Roche. Rosenbrock methods for partial differential equations and fractional orders of convergence. *SIAM Journal on Numerical Analysis*, 30(4):1084–1098, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ortiz:1969:TM

[Ort69] Eduardo L. Ortiz. The tau method. *SIAM Journal on Numerical Analysis*, 6 (3):480–492, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ortega:1973:SDE

[Ort73] James M. Ortega. Stability of difference equations and convergence of iterative processes. *SIAM Journal on Numerical Analysis*, 10(2): 268–282, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Olver:1965:EBAb

[OS65] F. W. J. Olver and F. Stenger. Error bounds for asymptotic solutions of second-order differential equations having an irregular singularity of arbitrary rank. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2):244–249, ???? 1965. CODEN ???? ISSN 0887-459X (print), 1095-7170 (electronic). URL `http://links.jstor.org/sici?sici=0887-459X(1965)2:2<244:EBFASO>2.0.CO%3B2-N`.

OSullivan:1990:CCM

[O'S90] Finbarr O'Sullivan. Convergence characteristics of methods of regularization estimators for nonlinear operator equations. *SIAM Journal on Numerical Analysis*, 27(6):1635–1649, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osher:1991:HOE

[OS91] Stanley Osher and Chi-Wang Shu. High-order essentially nonoscillatory schemes for Hamilton–Jacobi equations. *SIAM Journal on Numerical Analysis*, 28(4):907–922, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Okunbor:1992:ERK

[OS92] Daniel Okunbor and Robert D. Skeel. An explicit Runge–Kutta–Nyström method is canonical if and only if its adjoint is explicit. *SIAM Journal on Numerical Analysis*, 29(2):521–527, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osada:1990:CAM

[Osa90] Naoki Osada. A convergence acceleration method for some logarithmically convergent sequences. *SIAM Journal on Numerical Analysis*, 27(1):178–189, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osborne:1965:SLS

[Osb65] E. E. Osborne. Smallest least squares solutions of linear equations. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2):300–307, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Osborn:1967:AEC

[Osb67] John E. Osborn. Approximation of the eigenvalues of a class of unbounded, nonselfadjoint operators. *SIAM Journal on Numerical Analysis*, 4(1):45–54, March 1967. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic).

Osborne:1975:SSN

[Osb75] M. R. Osborne. Some special nonlinear least squares problems. *SIAM Journal on Numerical Analysis*, 12(4):571–592, September 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osborn:1976:AEN

[Osb76] John E. Osborn. Approximation of the eigenvalues of a nonselfadjoint operator arising in the study of the stability of stationary solutions of the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 13(2): 185–197, April 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osborne:1979:SMS

[Osb79] M. R. Osborne. The stabilized march is stable. *SIAM Journal on Numerical Analysis*, 16(6):923–933, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osher:1970:MRH

[Osh70] Stanley Osher. Mesh refinements for the heat equation. *SIAM Journal on Numerical Analysis*, 7(2):199–205, June 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osher:1981:NSP

[Osh81] Stanley Osher. Nonlinear singular perturbation problems and one-sided difference schemes. *SIAM Journal on Numerical Analysis*, 18(1): 129–144, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osher:1984:RSE

[Osh84] Stanley Osher. Riemann solvers, the entropy condition, and difference approximations. *SIAM Journal on Numerical Analysis*, 21(2): 217–235, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Osher:1985:CGM

[Osh85] Stanley Osher. Convergence of generalized MUSCL schemes. *SIAM Journal on Numerical Analysis*, 22(5): 947–961, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ostrowski:1964:AEA

[Ost64] A. M. Ostrowski. On approximation of equations by algebraic equations. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??):104–130,

???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic). See errata [Ost65].

Ostrowski:1965:EAE

[Ost65] A. M. Ostrowski. Errata: "On Approximation of Equations by Algebraic Equations" [J. Soc. Ind. Appl. Math., Ser. B Numer. anal. **1**] (1964), 104–130. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):203, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic). See [Ost64].

Ostrowski:1970:TCR

[Ost70] A. M. Ostrowski. A theorem on clusters of roots of polynomial equations. *SIAM Journal on Numerical Analysis*, 7(4):567–570, December 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ostrowski:1971:SPR

[Ost71] A. M. Ostrowski. Some properties of reduced polynomial equations. *SIAM Journal on Numerical Analysis*, 8(4):623–638, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ostrowski:1973:PEE

[Ost73] A. M. Ostrowski. *A Posteriori* error estimates in iterative procedures. *SIAM Journal on Numerical Analysis*, 10(2):290–298, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Oswald:1992:HCF

[Osw92] P. Oswald. Hierarchical conforming finite element methods for the biharmonic equation. *SIAM Journal on Numerical Analysis*, 29(6):1610–1625, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

ONeil:1975:CTD

[OT75] T. O'Neil and J. W. Thomas. The calculation of the topological degree by quadrature. *SIAM Journal on Numerical Analysis*, 12(5):673–680, October 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Otto:1996:MCD

[Ott96a] James S. Otto. Multigrid convergence for discretizations of singular perturbation problems with grid-aligned flow. *SIAM Journal on Numerical Analysis*, 33(1):399–416, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Otto:1996:APH

[Ott96b] Kurt Otto. Analysis of preconditioners for hyperbolic partial differential equations. *SIAM Journal on Numerical Analysis*, 33(6): 2131–2165, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26489`.

Owen:1997:MCV

[Owe97] Art B. Owen. Monte Carlo variance of scrambled net quadrature. *SIAM Journal on Numerical Analysis*, 34 (5):1884–1910, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27746`.

Pye:1973:ACH

[PA73] W. C. Pye and T. A. Atchison. An algorithm for the computation of the higher order G-transformation. *SIAM Journal on Numerical Analysis*, 10(1):1–7, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Padra:1997:PEE

[Pad97] Claudio Padra. *A Posteriori* error estimators for nonconforming approximation of some quasi-Newtonian flows. *SIAM Journal on Numerical Analysis*, 34(4): 1600–1615, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27832`.

Paige:1974:BMS

[Pai74] C. C. Paige. Bidiagonalization of matrices and solution of linear equations. *SIAM Journal on Numerical Analysis*, 11(1):197–209, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Paige:1979:FNS

[Pai79] C. C. Paige. Fast numerically stable computations for generalized linear least squares problems. *SIAM Journal on Numerical Analysis*, 16(1): 165–171, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Paige:1984:NRS

[Pai84] C. C. Paige. A note on a result of Sun Ji Guang: sensitivity of the CS and GSV decompositions. *SIAM Journal on Numerical Analysis*, 21(1): 186–191, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Palencia:1993:SRS

[Pal93] C. Palencia. A stability result for sectorial operators in Banach spaces. *SIAM Journal on Numerical Analysis*, 30 (5):1373–1384, October 1993. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic).

Palencia:1996:MNA

[Pal96] C. Palencia. Maximum norm analysis of completely discrete finite element methods for parabolic problems. *SIAM Journal on Numerical Analysis*, 33(4):1654–1668, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/25977.

Pandian:1985:CTC

[Pan85] Maharaja C. Pandian. A convergence test and componentwise error estimates for Newton type methods. *SIAM Journal on Numerical Analysis*, 22(4):779–791, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pan:1997:GSB

[Pan97] Jianhua Pan. Global superconvergence for the bilinear-constant scheme for the Stokes problem. *SIAM Journal on Numerical Analysis*, 34(6):2424–2430, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28616.

Pani:1998:GMF

[Pan98] Amiya K. Pani. An H^1-Galerkin mixed finite element method for parabolic partial differential equations. *SIAM Journal on Numerical Analysis*, 35(2):712–727, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28080.

Pao:1987:NMS

[Pao87] C. V. Pao. Numerical methods for semilinear parabolic equations. *SIAM Journal on Numerical Analysis*, 24(1):24–35, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pao:1999:NAC

[Pao99] C. V. Pao. Numerical analysis of coupled systems of nonlinear parabolic equations. *SIAM Journal on Numerical Analysis*, 36(2):393–416, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/31316.

Parter:1965:NMG

[Par65] Seymour V. Parter. Numerical methods for generalized axially symmetric potentials. *Journal of the Society for In-*

dustrial and Applied Mathematics: Series B, Numerical Analysis, 2(3):500–516, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Parter:1982:ESO

[Par82] Seymour V. Parter. On the eigenvalues of second order elliptic difference operators. *SIAM Journal on Numerical Analysis*, 19(3):518–530, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Parsons:1987:GPS

[Par87a] Bradley N. Parsons. General k-part stationary iterative solutions to linear systems. *SIAM Journal on Numerical Analysis*, 24(1):188–198, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Parter:1987:ETG

[Par87b] Seymour V. Parter. On an estimate for the three-grid MGR multigrid method. *SIAM Journal on Numerical Analysis*, 24(5):1032–1045, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Park:1995:MFE

[Par95] Eun-Jae Park. Mixed finite element methods for nonlinear second-order elliptic problems. *SIAM Journal on Numerical Analysis*, 32(3): 865–885, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Parter:1999:OGM

[Par99] Seymour V. Parter. On the overlapping grid method for elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 36(3):819–852, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31075`.

Pasciak:1979:PCM

[Pas79] Joseph Pasciak. The penalty correction method for elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 16(6):1046–1059, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pasciak:1982:SMN

[Pas82] Joseph E. Pasciak. Spectral methods for a nonlinear initial value problem involving pseudodifferential operators. *SIAM Journal on Numerical Analysis*, 19(1):142–154, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Patent:1976:EQE

[Pat76] Paul D. Patent. The effect of quadrature errors in the computation of L^2 piecewise polynomial approximations. *SIAM Journal on Numerical Analysis*, 13(3): 344–361, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pehlivanov:1994:LSM

[PCL94] A. I. Pehlivanov, G. F. Carey, and R. D. Lazarov. Least-squares mixed finite elements for second-order elliptic problems. *SIAM Journal on Numerical Analysis*, 31(5):1368–1377, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Peplow:1995:ASS

[PCW95] Andrew T. Peplow and Simon N. Chandler-Wilde. Approximate solution of second kind integral equations on infinite cylindrical surfaces. *SIAM Journal on Numerical Analysis*, 32(2): 594–609, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pelios:1967:RFA

[Pel67] A. Pelios. Rational function approximation as a well-conditioned matrix eigenvalue problem. *SIAM Journal on Numerical Analysis*, 4 (4):542–547, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pereyra:1967:ACD

[Per67a] Victor Pereyra. Accelerating the convergence of discretization algorithms. *SIAM Journal on Numerical Analysis*, 4 (4):508–533, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pereyra:1967:IMS

[Per67b] Victor Pereyra. Iterative methods for solving nonlinear least squares problems. *SIAM Journal on Numerical Analysis*, 4(1):27–36, March 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Percell:1976:CQC

[Per76] Peter Percell. On cubic and quartic Clough–Tocher finite elements. *SIAM Journal on Numerical Analysis*, 13(1): 100–103, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Perthame:1990:BTS

[Per90] B. Perthame. Boltzmann type schemes for gas dynamics and the entropy property. *SIAM Journal on Numerical Analysis*, 27(6):1405–1421, December 1990. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Perthame:1992:SOB

[Per92] B. Perthame. Second-order Boltzmann schemes for compressible Euler equations in one and two space dimensions. *SIAM Journal on Numerical Analysis*, 29(1):1–19, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Perugia:1997:FBM

[Per97] I. Perugia. A field-based mixed formulation for the two-dimensional magnetostatic problem. *SIAM Journal on Numerical Analysis*, 34(6): 2382–2391, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29346`.

Petryshyn:1965:CPL

[Pet65] W. V. Petryshyn. Constructional proof of lax-milgram lemma and its application to non-K-P.D. abstract and differential operator equations. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(3):404–420, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Petzold:1981:ENM

[Pet81] Linda R. Petzold. An efficient numerical method for highly oscillatory ordinary differential equations. *SIAM Journal on Numerical Analysis*, 18 (3):455–479, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Petzold:1986:ORI

[Pet86] L. R. Petzold. Order results for implicit Runge–Kutta methods applied to differential/algebraic systems. *SIAM Journal on Numerical Analysis*, 23(4):837–852, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pettersen:1987:RCM

[Pet87] Øystein Pettersen. The random choice method: Structural stability of a conservation equation in reservoir dynamics. *SIAM Journal on Numerical Analysis*, 24(5): 997–1007, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Petkovic:1989:HLA

[Pet89] Miodrag S. Petković. On halley-like algorithms for simultaneous approximation of polynomial complex zeros. *SIAM Journal on Numerical Analysis*, 26(3):740–763, June 1989. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Peterson:1991:NCD

[Pet91] Todd E. Peterson. A note on the convergence of the discontinuous Galerkin method for a scalar hyperbolic equation. *SIAM Journal on Numerical Analysis*, 28(1):133–140, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Petersson:1992:NMC

[Pet92a] N. Anders Petersson. A numerical method to calculate the two-dimensional flow around an underwater obstacle. *SIAM Journal on Numerical Analysis*, 29(1):20–31, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Petras:1992:EBG

[Pet92b] Knut Petras. Error bounds for Gaussian and related quadrature and applications to R-Convex functions. *SIAM Journal on Numerical Analysis*, 29(2):578–585, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Peters:1995:SS

[Pet95] Jörg Peters. C^1-surface splines. *SIAM Journal on Numerical Analysis*, 32(2): 645–666, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Petersen:1998:GIS

[Pet98a] W. P. Petersen. A general implicit splitting for stabilizing numerical simulations of Itô stochastic differential equations. *SIAM Journal on Numerical Analysis*, 35 (4):1439–1451, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30397`.

Petry:1998:SAT

[Pet98b] Thomas Petry. On the stability of the Abramov transfer for differential-algebraic equations of index 1. *SIAM Journal on Numerical Analysis*, 35 (1):201–216, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26666`.

Petersson:1999:FEA

[Pet99] Joakim Petersson. A finite element analysis of optimal variable thickness sheets. *SIAM Journal on Numerical Analysis*, 36(6): 1759–1778, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http:/`

/epubs.siam.org/sam-bin/dbq/article/31396.

Pflaum:1997:CCT

[Pfl97] Christoph Pflaum. Convergence of the combination technique for second-order elliptic differential equations. *SIAM Journal on Numerical Analysis*, 34(6): 2431–2455, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26029.

Pruess:1995:ANM

[PFX95] Steven Pruess, Charles T. Fulton, and Yuantao Xie. An asymptotic numerical method for a class of singular Sturm–Liouville problems. *SIAM Journal on Numerical Analysis*, 32(5):1658–1676, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Prasad:1973:UCF

[PH73] J. Prasad and H. Hayashi. On the uniform convergence of Fourier–Jacobi series. *SIAM Journal on Numerical Analysis*, 10(1):23–27, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Phillips:1972:UCP

[Phi72] James L. Phillips. The use of collocation as a projection method for solving linear operator equations. *SIAM Journal on Numerical Analysis*, 9 (1):14–28, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pietrzykowski:1969:EPM

[Pie69] Tomasz Pietrzykowski. An exact potential method for constrained maxima. *SIAM Journal on Numerical Analysis*, 6(2):299–304, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See erratum [Pie71].

Pietrzykowski:1971:EEP

[Pie71] T. Pietrzykowski. Erratum: “An Exact Potential Method for Constrained Maxima” [SIAM J. Numer. Anal. **6** (1969), no. 2, 299–304]. *SIAM Journal on Numerical Analysis*, 8(2):481, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [Pie69].

Pierre:1995:OSB

[Pie95] Roger Pierre. Optimal selection of the bubble function in the stabilization of the P1-P1 element for the Stokes problem. *SIAM Journal on Numerical Analysis*, 32(4):1210–1224, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pitkaranta:1978:SDD

[Pit78] Juhani Pitkäranta. On the spatial differencing of the discrete ordinate neutron transport equation. *SIAM Journal on Numerical Analysis*, 15(5): 859–869, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Phillips:1990:CIE

[PK90] Timothy N. Phillips and Andreas Karageorghis. On the coefficients of integrated expansions of ultraspherical polynomials. *SIAM Journal on Numerical Analysis*, 27(3): 823–830, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Porsching:1987:RBM

[PL87] T. A. Porsching and M. Lin Lee. The reduced basis method for initial value problems. *SIAM Journal on Numerical Analysis*, 24(6):1277–1287, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Plato:1998:MCR

[Pla98] R. Plato. The method of conjugate residuals for solving the Galerkin equations associated with symmetric positive semidefinite ill-posed problems. *SIAM Journal on Numerical Analysis*, 35 (4):1621–1645, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31792`.

Poole:1987:MIM

[PO87] Eugene L. Poole and James M. Ortega. Multicolor ICCG methods for vector computers. *SIAM Journal on Numerical Analysis*, 24(6):1394–1418, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Polak:1974:GCS

[Pol74] E. Polak. A globally converging secant method with applications to boundary value problems. *SIAM Journal on Numerical Analysis*, 11(3): 529–537, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Porsching:1969:JGS

[Por69] T. A. Porsching. Jacobi and Gauss–Seidel methods for nonlinear network problems. *SIAM Journal on Numerical Analysis*, 6(3):437–449, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Porsching:1971:RCJ

[Por71] T. A. Porsching. On rates of convergence of Jacobi and

Gauss–Seidel methods for M-functions. *SIAM Journal on Numerical Analysis*, 8 (3):575–582, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Poreda:1973:AP

[Por73] S. J. Poreda. Approximation by δ-polynomials. *SIAM Journal on Numerical Analysis*, 10(1):50–54, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Potra:1993:ILM

[Pot93] Florian A. Potra. Implementation of linear multistep methods for solving constrained equations of motion. *SIAM Journal on Numerical Analysis*, 30(3):774–789, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Powell:1969:LDL

[Pow69] M. J. D. Powell. The local dependence of least squares cubic splines. *SIAM Journal on Numerical Analysis*, 6 (3):398–413, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Parlett:1973:GTP

[PP73a] B. N. Parlett and W. G. Poole, Jr. A geometric theory for the QR, LU and power iterations. *SIAM Journal on Numerical Analysis*, 10 (2):389–412, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pironneau:1973:RCC

[PP73b] O. Pironneau and E. Polak. Rate of convergence of a class of methods of feasible directions. *SIAM Journal on Numerical Analysis*, 10(1): 161–174, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pani:1996:FEM

[PP96] Amiya K. Pani and Todd E. Peterson. Finite element methods with numerical quadrature for parabolic integrodifferential equations. *SIAM Journal on Numerical Analysis*, 33(3):1084–1105, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Prenter:1976:OCE

[PR76] P. M. Prenter and R. D. Russell. Orthogonal collocation for elliptic partial differential equations. *SIAM Journal on Numerical Analysis*, 13 (6):923–939, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Passow:1977:MCS

[PR77] Eli Passow and John A. Roulier. Monotone and convex spline interpolation. *SIAM Journal on Numerical Analysis*, 14(5):904–909, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Philips:1982:CFD

[PR82] Richard B. Philips and Milton E. Rose. Compact finite difference schemes for mixed initial-boundary value problems. *SIAM Journal on Numerical Analysis*, 19(4):698–720, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Paine:1986:CCM

[PR86a] John Paine and Robert D. Russell. Conditioning of collocation matrices and discrete Green's functions. *SIAM Journal on Numerical Analysis*, 23(2):376–392, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Porter:1986:NRB

[PR86b] Michael B. Porter and Edward L. Reiss. A note on the relationship between finite-difference and shooting methods for ODE eigenvalue problems. *SIAM Journal on Numerical Analysis*, 23(5):1034–1039, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Parter:1995:PLS

[PR95] Seymour V. Parter and Ernest E. Rothman. Preconditioning Legendre spectral collocation approximations to elliptic problems. *SIAM Journal on Numerical Analysis*, 32 (2):333–385, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Peters:1998:AAG

[PR98] Jörg Peters and Ulrich Reif. Analysis of algorithms generalizing B-spline subdivision. *SIAM Journal on Numerical Analysis*, 35(2): 728–748, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30434`.

Prasad:1970:WI

[Pra70] J. Prasad. On the weighted (0,2) interpolation. *SIAM Journal on Numerical Analysis*, 7(3):428–446, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Prenter:1973:CMN

[Pre73] P. M. Prenter. A collection method for the numerical solution of integral equations. *SIAM Journal on Numerical Analysis*, 10(4):570–581, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Price:1976:CEB

[Pri76] Thomas E. Price, Jr. Cubature error bounds for a class of analytic functions. *SIAM Journal on Numerical Analysis*, 13(2):227–235, April 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pridor:1977:EMN

[Pri77] Adir Pridor. Estimation of moments for the numerical solution of transport problems. *SIAM Journal on Numerical Analysis*, 14(3):426–440, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Price:1979:OPN

[Pri79] Thomas E. Price, Jr. Orthogonal polynomials for nonclassical weight functions. *SIAM Journal on Numerical Analysis*, 16(6):999–1006, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Peisker:1990:ISM

[PRS90] P. Peisker, W. Rust, and E. Stein. Iterative solution methods for plate bending problems: Multigrid and preconditioned cg algorithm. *SIAM Journal on Numerical Analysis*, 27(6):1450–1465, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pruess:1973:EES

[Pru73] Steven Pruess. Estimating the eigenvalues of Sturm–Liouville problems by approximating the differential equation. *SIAM Journal on Numerical Analysis*, 10(1):55–68, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Prufer:1982:CAP

[Prü82] Michael Prüfer. A combinatorial algorithm providing alternating approximations for a zero of an M-function. *SIAM Journal on Numerical Analysis*, 19(3):643–652, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pryce:1984:NMR

[Pry84] J. D. Pryce. A new measure of relative error for vectors. *SIAM Journal on Numerical Analysis*, 21(1):202–215, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Paige:1975:SSI

[PS75] C. C. Paige and M. A. Saunders. Solution of sparse indefinite systems of linear equations. *SIAM Journal on Numerical Analysis*, 12(4):617–629, September 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Paige:1977:LSE

[PS77] C. C. Paige and M. A. Saunders. Least squares estimation of discrete linear dynamic systems using orthogonal transformations. *SIAM Journal on Numerical Analysis*, 14(2):180–193, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Parter:1980:LBI

[PS80] Seymour V. Parter and Michael Steuerwalt. On K-line and $K \times K$ block iterative schemes for a problem arising in three-dimensional elliptic difference equations. *SIAM Journal on Numerical Analysis*, 17(6):823–839, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Paige:1981:TGS

[PS81] C. C. Paige and M. A. Saunders. Towards a generalized singular value decomposition. *SIAM Journal on Numerical Analysis*, 18(3):398–405, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Parter:1982:BIM

[PS82] Seymour V. Parter and Michael Steuerwalt. Block iterative methods for elliptic and parabolic difference equations. *SIAM Journal on Numerical Analysis*, 19(6):1173–1195, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pitkaranta:1983:EEC

[PS83] Juhani Pitkäranta and L. Ridgway Scott. Error estimates for the combined spatial and angular approximations of the transport equation for slab geometry. *SIAM Journal on Numerical Analysis*, 20(5):922–950, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Parter:1985:BIM

[PS85] Seymour V. Parter and Michael Steuerwalt. Block iterative methods for elliptic finite element equations. *SIAM Journal on Numerical Analysis*, 22(1):146–179, February 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pego:1988:IGS

[PS88] Robert L. Pego and Denis Serre. Instabilities in Glimm's scheme for two systems of mixed type. *SIAM Journal on Numerical Analysis*, 25(5):

965–988, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Peters:1992:SIC

[PS92] Jörg Peters and Meera Sitharam. Stability of interpolation from C^1 cubics at the vertices of an underlying triangulation. *SIAM Journal on Numerical Analysis*, 29 (2):528–533, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Palczewski:1997:CRD

[PSB97] Andrzej Palczewski, Jacques Schneider, and Alexandre V. Bobylev. A consistency result for a discrete-velocity model of the Boltzmann equation. *SIAM Journal on Numerical Analysis*, 34(5): 1865–1883, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28900.

Papadopoulou:1989:BAI

[PSP89] E. P. Papadopoulou, Y. G. Saridakis, and T. S. Papatheodorou. Block AOR iterative schemes for large-scale least-squares problems. *SIAM Journal on Numerical Analysis*, 26(3):637–660, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Powell:1979:ESH

[PT79] M. J. D. Powell and Ph. L. Toint. On the estimation of sparse Hessian matrices. *SIAM Journal on Numerical Analysis*, 16(6):1060–1074, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Panier:1991:AME

[PT91] Eliane R. Panier and André L. Tits. Avoiding the maratos effect by means of a nonmonotone line search I. general constrained problems. *SIAM Journal on Numerical Analysis*, 28(4):1183–1195, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Papakostas:1997:HCI

[PT97] S. N. Papakostas and Ch. Tsitouras. Highly continuous interpolants for one-step ODE solvers and their application to Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 34 (1):22–47, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26580.

Papakostas:1996:GFE

[PTP96] S. N. Papakostas, Ch Tsitouras, and G. Papageorgiou. A general family of explicit Runge–Kutta pairs of orders 6(5). *SIAM Journal on Numerical Analysis*, 33(3): 917–936, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pierce:1972:HOCa

[PV72] J. G. Pierce and R. S. Varga. Higher order convergence results for the Rayleigh–Ritz method applied to eigenvalue problems. I: Estimates relating Rayleigh–Ritz and Galerkin approximations to eigenfunctions. *SIAM Journal on Numerical Analysis*, 9(1): 137–151, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://www.math.kent.edu/~varga/pub/paper_67.pdf.

Prasad:1979:LIQ

[PV79] J. Prasad and A. K. Varma. Lacunary interpolation by quintic splines. *SIAM Journal on Numerical Analysis*, 16(6): 1075–1079, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Peters:1970:GE

[PW70] G. Peters and J. H. Wilkinson. $Ax = \lambda Bx$ and the generalized eigenproblem. *SIAM Journal on Numerical Analysis*, 7(4):479–492, December 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Percell:1978:LRF

[PW78] Peter Percell and Mary Fanett Wheeler. A local residual finite element procedure for elliptic equations. *SIAM Journal on Numerical Analysis*, 15(4):705–714, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Percell:1980:FEC

[PW80] Peter Percell and Mary Fanett Wheeler. A C^1 finite element collocation method for elliptic equations. *SIAM Journal on Numerical Analysis*, 17(5): 605–622, October 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Pavarino:1996:PBI

[PW96] Luca F. Pavarino and Olof B. Widlund. A polylogarithmic bound for an iterative substructuring method for spectral elements in three dimensions. *SIAM Journal on Numerical Analysis*, 33 (4):1303–1335, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26517.

Qi:1982:NMT

[Qi82] L. Qi. A note on the Moore test for nonlinear systems. *SIAM Journal on Numerical Analysis*, 19(4):851–

857, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Qi-nian:1999:AMD

[Qn99] Jin Qi-nian. Applications of the modified discrepancy principle to Tikhonov regularization of nonlinear ill-posed problems. *SIAM Journal on Numerical Analysis*, 36(2):475–490, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/31547.

Quarteroni:1987:FSM

[Qua87] Alfio Quarteroni. Fourier spectral methods for pseudoparabolic equations. *SIAM Journal on Numerical Analysis*, 24(2):323–335, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Queck:1989:CFP

[Que89] Werner Queck. The convergence factor of preconditioned algorithms of the arrow-hurwicz type. *SIAM Journal on Numerical Analysis*, 26(4):1016–1030, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Quarteroni:1992:FEP

[QZ92] Alfio Quarteroni and Elena Zampieri. Finite element preconditioning for Legendre spectral collocation approximations to elliptic equations and systems. *SIAM Journal on Numerical Analysis*, 29(4):917–936, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rabinowitz:1967:GIP

[Rab67] Philip Rabinowitz. Gaussian integration in the presence of a singularity. *SIAM Journal on Numerical Analysis*, 4(2):191–201, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rachford:1968:REA

[Rac68a] H. H. Rachford, Jr. Rounding errors in alternating direction methods for parabolic problems. *SIAM Journal on Numerical Analysis*, 5(2):407–421, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rachford:1968:REP

[Rac68b] H. H. Rachford, Jr. Rounding errors in parabolic problems. I: The one-space variable case. *SIAM Journal on Numerical Analysis*, 5(1):156–171, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rachford:1973:TLD

[Rac73] H. H. Rachford, Jr. Two-level discrete-time Galerkin approximations for second order nonlinear parabolic partial differential equations. *SIAM Journal on Numerical Analysis*, 10(6):1010–1026, December 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ragozin:1985:DFS

[Rag85] David L. Ragozin. The discrete *k*-functional and spline smoothing of noisy data. *SIAM Journal on Numerical Analysis*, 22(6):1243–1254, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rakotch:1976:NSL

[Rak76] E. Rakotch. Numerical solution with large matrices of Fredholm's integral equation. *SIAM Journal on Numerical Analysis*, 13(1):1–7, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rall:1974:NCN

[Ral74] L. B. Rall. A note on the convergence of Newton's method. *SIAM Journal on Numerical Analysis*, 11(1):34–36, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rall:1980:CET

[Ral80] L. B. Rall. A comparison of the existence theorems of Kantorovich and Moore. *SIAM Journal on Numerical Analysis*, 17(1):148–161, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ratschek:1980:CF

[Rat80] H. Ratschek. Centered forms. *SIAM Journal on Numerical Analysis*, 17(5):656–662, October 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rathsfeld:1995:NMI

[Rat95] A. Rathsfeld. Nyström's method and iterative solvers for the solution of the double-layer potential equation over polyhedral boundaries. *SIAM Journal on Numerical Analysis*, 32(3):924–951, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rauch:1973:CTC

[Rau73] Steven W. Rauch. A convergence theory for a class of nonlinear programming problems. *SIAM Journal on Numerical Analysis*, 10(1):207–228, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rauch:1985:CFE

[Rau85] Jeffrey Rauch. On convergence of the finite element method for the wave equation. *SIAM Journal on Numerical Analysis*, 22(2): 245–249, April 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Robinson:1979:PBB

[RB79] Peter D. Robinson and Michael F. Barnsley. Pointwise bivariational bounds on solutions of Fredholm integral equations. *SIAM Journal on Numerical Analysis*, 16(1): 135–144, February 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rogers:1979:APT

[RBC79] Joel C. W. Rogers, Alan E. Berger, and Melvyn Ciment. The alternating phase truncation method for numerical solution of a Stefan problem. *SIAM Journal on Numerical Analysis*, 16(4):563–587, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rivlin:1966:CUA

[RC66] T. J. Rivlin and E. W. Cheney. A comparison of uniform approximations on an interval and a finite subset thereof. *SIAM Journal on Numerical Analysis*, 3(2): 311–320, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Russell:1978:AMS

[RC78] R. D. Russell and J. Christiansen. Adaptive mesh selection strategies for solving boundary value problems. *SIAM Journal on Numerical Analysis*, 15(1):59–80, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Richter-Dyn:1971:MIA

[RD71a] Nira Richter-Dyn. Minimal interpolation and approximation in Hilbert spaces. *SIAM Journal on Numerical Analysis*, 8(3):583–597, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Richter-Dyn:1971:PMI

[RD71b] Nira Richter-Dyn. Properties of minimal integration rules. II. *SIAM Journal on Numerical Analysis*, 8(3):497–508, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Richter-Dyn:1979:BNA

[RD79] Nira Richter-Dyn. On best nonlinear approximation in sign-monotone norms and in norms induced by inner products. *SIAM Journal on Nu-*

merical Analysis, 16(4):612–622, August 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reddien:1976:AMT

[Red76] G. W. Reddien. Approximation methods for two-point boundary value problems with nonlinear boundary conditions. *SIAM Journal on Numerical Analysis*, 13 (3):405–411, June 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reddien:1978:NMS

[Red78] G. W. Reddien. On Newton's method for singular problems. *SIAM Journal on Numerical Analysis*, 15(5):993–996, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reemtsen:1990:MFR

[Ree90] Rembert Reemtsen. Modifications of the first Remez algorithm. *SIAM Journal on Numerical Analysis*, 27(2): 507–518, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reimer:1968:BHS

[Rei68a] Manfred Reimer. Bounds for the Horner sums. *SIAM Journal on Numerical Analysis*, 5 (3):461–469, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reimer:1968:FDF

[Rei68b] Manfred Reimer. Finite difference forms containing derivatives of higher order. *SIAM Journal on Numerical Analysis*, 5(4):725–738, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reid:1972:UCG

[Rei72] J. K. Reid. The use of conjugate gradients for systems of linear equations possessing "Property A". *SIAM Journal on Numerical Analysis*, 9 (2):325–332, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reinsch:1974:TES

[Rei74] Christian Reinsch. Two extensions of the sard-schoenberg theory of best approximation. *SIAM Journal on Numerical Analysis*, 11 (1):45–51, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reinhardt:1981:PEE

[Rei81] Hans-Jürgen Reinhardt. *A Posteriori* error estimates for the finite element solution of a singularly perturbed linear ordinary differential equation.

SIAM Journal on Numerical Analysis, 18(3):406–430, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reichel:1988:PCM

[Rei88] Lothar Reichel. Polynomials by conformal mapping for the Richardson iteration method for complex linear systems. *SIAM Journal on Numerical Analysis*, 25(6): 1359–1368, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reich:1996:SIC

[Rei96] Sebastian Reich. Symplectic integration of constrained Hamiltonian systems by composition methods. *SIAM Journal on Numerical Analysis*, 33(2):475–491, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reich:1999:BEA

[Rei99] Sebastian Reich. Backward error analysis for numerical integrators. *SIAM Journal on Numerical Analysis*, 36 (5):1549–1570, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32979`.

Reusken:1992:MNC

[Reu92] Arnold Reusken. On maximum norm convergence of multigrid methods for two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 29(6):1569–1578, December 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reusken:1994:MNC

[Reu94] Arnold Reusken. On maximum norm convergence of multigrid methods for elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 31(2): 378–392, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reynolds:1972:CFD

[Rey72] Albert C. Reynolds, Jr. Convergent finite difference schemes for nonlinear parabolic equations. *SIAM Journal on Numerical Analysis*, 9 (4):523–533, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rheinboldt:1968:UCT

[Rhe68] Werner C. Rheinboldt. A unified convergence theory for a class of iterative processes. *SIAM Journal on Numerical Analysis*, 5(1):42–63, March 1968. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Rheinboldt:1978:NMC

[Rhe78] Werner C. Rheinboldt. Numerical methods for a class of finite dimensional bifurcation problems. *SIAM Journal on Numerical Analysis*, 15 (1):1–11, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rheinboldt:1980:TMR

[Rhe80a] Werner C. Rheinboldt. On a theory of mesh-refinement processes. *SIAM Journal on Numerical Analysis*, 17 (6):766–778, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rheinboldt:1980:SFN

[Rhe80b] Werner C. Rheinboldt. Solution fields of nonlinear equations and continuation methods. *SIAM Journal on Numerical Analysis*, 17(2): 221–237, April 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rheinboldt:1982:CCB

[Rhe82] Werner C. Rheinboldt. Computation of critical boundaries on equilibrium manifolds. *SIAM Journal on Numerical Analysis*, 19(3): 653–669, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rheinboldt:1993:SSP

[Rhe93] Werner C. Rheinboldt. On the sensitivity of solutions of parameterized equations. *SIAM Journal on Numerical Analysis*, 30(2):305–320, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reinhardt:1999:SRD

[RHH99] Hans-Jürgen Reinhardt, Houde Han, and Dinh Nho Hào. Stability and regularization of a discrete approximation to the Cauchy problem for Laplace's equation. *SIAM Journal on Numerical Analysis*, 36(3):890–905, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31695`.

Rice:1966:TC

[Ric66] John R. Rice. A theory of condition. *SIAM Journal on Numerical Analysis*, 3 (2):287–310, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rice:1967:CCA

[Ric67] John R. Rice. Characterization of Chebyshev approximations by splines. *SIAM Journal on Numerical Analysis*, 4

(4):557–565, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Richter:1970:PMI

[Ric70] Nira Richter. Properties of minimal integration rules. *SIAM Journal on Numerical Analysis*, 7(1):67–78, March 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Richter:1978:NSI

[Ric78] G. R. Richter. Numerical solution of integral equations of the first kind with nonsmooth kernels. *SIAM Journal on Numerical Analysis*, 15 (3):511–522, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Richter:1991:EFE

[Ric91] Gerard R. Richter. An explicit finite element method for convection-dominated steady state convection-diffusion equations. *SIAM Journal on Numerical Analysis*, 28(3): 744–759, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Riess:1971:NEB

[Rie71] R. D. Riess. A note on error bounds for Gauss–Chebyshev quadrature. *SIAM Journal on Numerical Analysis*, 8 (3):509–511, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Riedel:1994:GEP

[Rie94] Kurt S. Riedel. Generalized epsilon-pseudospectra. *SIAM Journal on Numerical Analysis*, 31(4):1219–1225, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ringhofer:1984:CSQ

[Rin84] Christian Ringhofer. On collocation schemes for quasilinear singularly perturbed boundary value problems. *SIAM Journal on Numerical Analysis*, 21(5):864–882, October 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ringhofer:1990:SMN

[Rin90] Christian Ringhofer. A spectral method for the numerical simulation of quantum tunneling phenomena. *SIAM Journal on Numerical Analysis*, 27(1):32–50, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ringhofer:1992:SCT

[Rin92] Christian Ringhofer. A spectral collocation technique for the solution of the Wigner–Poisson problem. *SIAM Journal on Numerical Analysis*, 29

(3):679–700, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rippa:1992:LTT

[Rip92] Shmuel Rippa. Long and thin triangles can be good for linear interpolation. *SIAM Journal on Numerical Analysis*, 29 (1):257–270, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ritter:1975:MCD

[Rit75] Klaus Ritter. A method of conjugate directions for linearly constrained nonlinear programming problems. *SIAM Journal on Numerical Analysis*, 12(3):273–303, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ritov:1990:CAF

[Rit90] Y. Ritov. The convergence of an algorithm for finding the distance between a ball in a subspace and a sum of subspaces. *SIAM Journal on Numerical Analysis*, 27(5):1355–1367, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rivlin:1964:PRT

[Riv64] T. J. Rivlin. A property of the ratio of trigonometric polynomials. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??):131–132, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic).

Rivlin:1975:OSL

[Riv75] T. J. Rivlin. Optimally stable Lagrangian numerical differentiation. *SIAM Journal on Numerical Analysis*, 12(5):712–725, October 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rivara:1984:MRP

[Riv84] María-Cecilia Rivara. Mesh refinement processes based on the generalized bisection of simplices. *SIAM Journal on Numerical Analysis*, 21(3):604–613, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Riess:1969:EGC

[RJ69] R. D. Riess and L. W. Johnson. Estimating Gauss–Chebyshev quadrature errors. *SIAM Journal on Numerical Analysis*, 6(4):557–559, December 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Riess:1974:EIF

[RJ74] R. D. Riess and L. W. Johnson. Errors in interpolating functions at the zeros of $T_{n+1}(X)$. *SIAM Journal* *on Numerical Analysis*, 11(2): 244–253, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ramanujam:1988:MLE

[RK88] N. Ramanujam and V. M. Sunanda Kumari. Method of lines for elliptic differential equations with a small parameter. *SIAM Journal on Numerical Analysis*, 25(3):550–563, June 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rowland:1977:ECN

[RM77] J. H. Rowland and G. J. Miel. Exit criteria for Newton–Cotes quadrature rules. *SIAM Journal on Numerical Analysis*, 14(6):1145–1150, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Robinson:1966:ISS

[Rob66] Stephen M. Robinson. Interpolative solution of systems of nonlinear equations. *SIAM Journal on Numerical Analysis*, 3(4):650–658, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Robinson:1975:STS

[Rob75] Stephen M. Robinson. Stability theory for systems of inequalities. Part I: Linear systems. *SIAM Journal on Numerical Analysis*, 12(5):754–769, October 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Robinson:1976:STS

[Rob76] Stephen M. Robinson. Stability theory for systems of inequalities, Part II: Differentiable nonlinear systems. *SIAM Journal on Numerical Analysis*, 13(4):497–513, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Robinson:1979:QIR

[Rob79] Stephen M. Robinson. Quadratic interpolation is risky. *SIAM Journal on Numerical Analysis*, 16(3):377–379, June 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Roche:1989:IRK

[Roc89] Michel Roche. Implicit Runge–Kutta methods for differential algebraic equations. *SIAM Journal on Numerical Analysis*, 26(4): 963–975, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rogier:1993:MNS

[Rog93] François Rogier. Mathematical and numerical study of a magnetostatic problem around a thin shield. *SIAM*

Journal on Numerical Analysis, 30(2):454–477, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rohn:1993:IIM

[Roh93] J. Rohn. Inverse interval matrix. *SIAM Journal on Numerical Analysis*, 30(3): 864–870, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Romate:1990:LEA

[Rom90] J. E. Romate. Local error analysis of three-dimensional panel methods in terms of curvilinear surface coordinates. *SIAM Journal on Numerical Analysis*, 27(2): 529–542, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rosenberg:1967:BPM

[Ros67] Lloyd Rosenberg. Bernstein polynomials and Monte Carlo integration. *SIAM Journal on Numerical Analysis*, 4 (4):566–574, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rosen:1970:ASE

[Ros70a] J. B. Rosen. Approximate solution and error bounds for quasi-linear elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 7 (1):80–103, March 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rosman:1970:ERR

[Ros70b] Bernard H. Rosman. Extension of results by Rice and Schumaker on spline approximation. *SIAM Journal on Numerical Analysis*, 7(2): 314–316, June 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rosenzweig:1973:FDA

[Ros73] M. B. Rosenzweig. Finite difference approximation of the weak solution of a mildly nonlinear Dirichlet problem. *SIAM Journal on Numerical Analysis*, 10 (4):635–646, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rosser:1980:MFB

[Ros80] J. Barkley Rosser. Majorization formulas for a biharmonic function of two variables. *SIAM Journal on Numerical Analysis*, 17(2): 207–220, April 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rose:1981:UNT

[Ros81] Milton E. Rose. A “unified” numerical treatment of the wave equation and the Cauchy–Riemann equations. *SIAM Journal on Numerical Analysis*, 18(2): 372–376, April 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Roulier:1971:LOI

[Rou71] John Roulier. Linear operators invariant on nonnegative monotone functions. *SIAM Journal on Numerical Analysis*, 8(1):30–35, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Roux:1982:VSS

[Rou82] Marie-Noëlle Le Roux. Variable step size multistep methods for parabolic problems. *SIAM Journal on Numerical Analysis*, 19(4):725–741, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rowland:1967:SEC

[Row67] John H. Rowland. On the structure of the error curve in Chebyshev approximation by polynomials. *SIAM Journal on Numerical Analysis*, 4 (3):398–405, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rowland:1969:LDP

[Row69] John H. Rowland. On the location of the deviation points in Chebyshev approximation by polynomials. *SIAM Journal on Numerical Analysis*, 6(1):118–126, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ratschek:1980:ACF

[RR80] H. Ratschek and J. Rokne. About the centered form. *SIAM Journal on Numerical Analysis*, 17(3):333–337, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rabier:1986:CCS

[RR86] P. J. Rabier and G. W. Reddien. Characterization and computation of singular points with maximum rank deficiency. *SIAM Journal on Numerical Analysis*, 23 (5):1040–1051, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ratschek:1987:EGO

[RR87] H. Ratschek and J. G. Rokne. Efficiency of a global optimization algorithm. *SIAM Journal on Numerical Analysis*, 24(5):1191–1201, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rabier:1995:NSE

[RR95] Patrick J. Rabier and Werner C. Rheinboldt. On the numerical solution of the Euler–

Lagrange equations. *SIAM Journal on Numerical Analysis*, 32(1):318–329, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ranero:1996:ETD

[RR96] Ibrahim Bless Ranero and Tomás Chacón Rebello. An efficient two-dimensional vortex method with long time accuracy. *SIAM Journal on Numerical Analysis*, 33 (4):1425–1450, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24932`.

Rohn:1998:ESL

[RR98] Jiri Rohn and Georg Rex. Enclosing solutions of linear equations. *SIAM Journal on Numerical Analysis*, 35(2):524–539, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29942`.

Russell:1975:NMS

[RS75] R. D. Russell and L. F. Shampine. Numerical methods for singular boundary value problems. *SIAM Journal on Numerical Analysis*, 12 (1):13–36, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rabinowitz:1984:PIP

[RS84] Philip Rabinowitz and Ian H. Sloan. Product integration in the presence of a singularity. *SIAM Journal on Numerical Analysis*, 21(1):149–166, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ruotsalainen:1987:SBE

[RS87] K. Ruotsalainen and J. Saranen. Some boundary element methods using Dirac's distributions as trial functions. *SIAM Journal on Numerical Analysis*, 24(4):816–827, August 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ringhofer:1989:ANM

[RS89] C. Ringhofer and C. Schmeiser. An approximate Newton method for the solution of the basic semiconductor device equations. *SIAM Journal on Numerical Analysis*, 26 (3):507–516, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Roe:1992:OPL

[RS92] P. L. Roe and D. Sidilkover. Optimum positive linear schemes for advection in two and three dimensions. *SIAM Journal on Numerical Analysis*, 29(6):1542–1568, December 1992. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Reddy:1995:SCC

[RS95] B. D. Reddy and J. C. Simo. Stability and convergence of a class of enhanced strain methods. *SIAM Journal on Numerical Analysis*, 32(6):1705–1728, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Riemenschneider:1997:MIS

[RS97a] Sherman D. Riemenschneider and Zuowei Shen. Multidimensional interpolatory subdivision schemes. *SIAM Journal on Numerical Analysis*, 34(6):2357–2381, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29431`.

Russell:1997:SCD

[RS97b] Robert D. Russell and Weiwei Sun. Spline collocation differentiation matrices. *SIAM Journal on Numerical Analysis*, 34(6):2274–2287, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27798`.

Roberts:1969:PTN

[RSE69] S. M. Roberts, J. S. Shipman, and W. J. Ellis. A perturbation technique for nonlinear two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 6(3):347–358, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rao:1976:RAA

[RSK76] T. Mahadeva Rao, K. Subramanian, and E. V. Krishnamurthy. Residue arithmetic algorithms for exact computation of g-inverses of matrices. *SIAM Journal on Numerical Analysis*, 13(2):155–171, April 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rouy:1992:VSA

[RT92] Elisabeth Rouy and Agnès Tourin. A viscosity solutions approach to shape-from-shading. *SIAM Journal on Numerical Analysis*, 29(3):867–884, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ryabenkii:1995:ABC

[RT95] V. S. Ryaben'kiĭ and S. V. Tsynkov. Artificial boundary conditions for the numerical solution of external viscous flow problems. *SIAM*

Journal on Numerical Analysis, 32(5):1355–1389, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ruas:1989:ESA

[Rua89] Vitoriano Ruas. Existence and stability of asymmetric finite-element approximations in nonlinear incompressible analysis. *SIAM Journal on Numerical Analysis*, 26 (5):1031–1059, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rubel:1964:BPA

[Rub64] L. A. Rubel. Bounded polynomial approximation. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??):133–136, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic).

Rude:1993:FAM

[Rüd93] Ulrich Rüde. Fully adaptive multigrid methods. *SIAM Journal on Numerical Analysis*, 30(1):230–248, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ruhe:1973:ANE

[Ruh73] Axel Ruhe. Algorithms for the nonlinear eigenvalue problem. *SIAM Journal on Numerical Analysis*, 10(4):674–689, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rulla:1996:EAI

[Rul96] Jim Rulla. Error analysis for implicit approximations to solutions to Cauchy problems. *SIAM Journal on Numerical Analysis*, 33(1):68–87, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rumelin:1982:NTS

[Rüm82] W. Rümelin. Numerical treatment of stochastic differential equations. *SIAM Journal on Numerical Analysis*, 19 (3):604–613, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Russell:1970:NSS

[Rus70] David L. Russell. Numerical solution of singular initial value problems. *SIAM Journal on Numerical Analysis*, 7(3):399–417, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Russell:1977:CCF

[Rus77] Robert D. Russell. A comparison of collocation and finite differences for two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 14(1):19–39, March 1977. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic).

Russell:1985:TSA

[Rus85] Thomas F. Russell. Time stepping along characteristics with incomplete iteration for a Galerkin approximation of miscible displacement in porous media. *SIAM Journal on Numerical Analysis*, 22(5): 970–1013, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rheinboldt:1974:LCU

[RV74] Werner C. Rheinboldt and James S. Vandergraft. On the local convergence of update methods. *SIAM Journal on Numerical Analysis*, 11 (5):1069–1085, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Renaut-Williamson:1989:FDR

[RW89a] R. A. Renaut-Williamson. Full discretisations of $u_{tt} = u_{xx}$ and rational approximations to $\cosh \mu z$. *SIAM Journal on Numerical Analysis*, 26 (2):338–347, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Renaut-Williamson:1989:SRA

[RW89b] R. A. Renaut-Williamson. Semidiscretisations of $u_{tt} = u_{xx}$ and rational approximations to $(\ln z)^2$. *SIAM Journal on Numerical Analysis*, 26 (2):320–337, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rosen:1995:MTA

[RW95] I. G. Rosen and Chunming Wang. A multilevel technique for the approximate solution of operator Lyapunov and algebraic Riccati equations. *SIAM Journal on Numerical Analysis*, 32(2): 514–541, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Rulla:1996:ORC

[RW96] Jim Rulla and Noel J. Walkington. Optimal rates of convergence for degenerate parabolic problems in two dimensions. *SIAM Journal on Numerical Analysis*, 33(1): 56–67, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Robinson:1986:BML

[RY86] P. D. Robinson and P. K. Yuen. Bivariational methods for linear integral equations with nonsymmetric kernels. *SIAM Journal on Numerical Analysis*, 23(6):1230–1240, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Settari:1973:GAC

[SA73] A. Settari and K. Aziz. A generalization of the additive correction methods for the iterative solution of matrix equations. *SIAM Journal on Numerical Analysis*, 10 (3):506–521, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saad:1980:RCL

[Saa80] Y. Saad. On the rates of convergence of the Lanczos and the block Lanczos methods. *SIAM Journal on Numerical Analysis*, 17(5):687–706, October 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saad:1982:LBA

[Saa82] Y. Saad. The Lanczos biorthogonalization algorithm and other oblique projection methods for solving large unsymmetric systems. *SIAM Journal on Numerical Analysis*, 19(3):485–506, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saad:1983:ISI

[Saa83] Youcef Saad. Iterative solution of indefinite symmetric linear systems by methods using orthogonal polynomials over two disjoint intervals. *SIAM Journal on Numerical Analysis*, 20(4):784–811, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saad:1987:LSP

[Saa87] Youcef Saad. Least squares polynomials in the complex plane and their use for solving nonsymmetric linear systems. *SIAM Journal on Numerical Analysis*, 24(1):155–169, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saad:1992:ASK

[Saa92] Y. Saad. Analysis of some Krylov subspace approximations to the matrix exponential operator. *SIAM Journal on Numerical Analysis*, 29(1): 209–228, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sabac:1997:OCR

[Şab97] Florin Şabac. The optimal convergence rate of monotone finite difference methods for hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 34(6): 2306–2318, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29347`.

Sackett:1971:IFB

[Sac71] Gary G. Sackett. An implicit free boundary problem for the heat equation. *SIAM Journal on Numerical Analysis*, 8 (1):80–96, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sammon:1982:CES

[Sam82] Peter H. Sammon. Convergence estimates for semidiscrete parabolic equation approximations. *SIAM Journal on Numerical Analysis*, 19(1): 68–92, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sammon:1983:FDA

[Sam83] Peter Sammon. Fully discrete approximation methods for parabolic problems with nonsmooth initial data. *SIAM Journal on Numerical Analysis*, 20(3):437–470, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sammon:1986:NAM

[Sam86] Peter H. Sammon. Numerical approximations for a miscible displacement process in porous media. *SIAM Journal on Numerical Analysis*, 23 (3):508–542, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sanders:1985:MGM

[San85] Richard Sanders. The moving grid method for nonlinear hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 22(4):713–728, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sandri:1994:FEA

[San94] Dominique Sandri. Finite element approximation of viscoelastic fluid flow: Existence of approximate solutions and error bounds. continuous approximation of the stress. *SIAM Journal on Numerical Analysis*, 31(2): 362–377, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sandboge:1998:QEC

[San98] Robert Sandboge. Quantitative error control for finite element methods for one-dimensional compressible flow. *SIAM Journal on Numerical Analysis*, 35(5): 2014–2034, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32162`.

Saranen:1990:PMC

[Sar90] Jukka Saranen. Projection methods for a class of Hammerstein equations. *SIAM*

Journal on Numerical Analysis, 27(6):1445–1449, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sasaki:1978:MMC

[Sas78] Tateaki Sasaki. Multidimensional Monte Carlo integration based on factorized approximation functions. *SIAM Journal on Numerical Analysis*, 15(5):938–952, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saylor:1967:NEC

[Say67] Richard Saylor. Numerical elliptic continuation. *SIAM Journal on Numerical Analysis*, 4(4):575–581, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saylo:1974:SOS

[Say74] Paul E. Saylo. Second order strongly implicit symmetric factorization methods for the solution of elliptic difference equations. *SIAM Journal on Numerical Analysis*, 11(5):894–908, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sameh:1977:STS

[SB77a] Ahmed H. Sameh and Richard P. Brent. Solving triangular systems on a parallel computer. *SIAM Journal on Numerical Analysis*, 14(6):1101–1113, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1977:IFP

[SB77b] A. H. Stroud and David L. Barrow. Integration formulas for the Poisson equations. *SIAM Journal on Numerical Analysis*, 14(5):888–903, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Szymczak:1984:AEE

[SB84] W. G. Szymczak and I. Babuška. Adaptivity and error estimation for the finite element method applied to convection diffusion problems. *SIAM Journal on Numerical Analysis*, 21(5):910–954, October 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shelley:1988:OPA

[SB88] M. J. Shelley and G. R. Baker. Order-preserving approximations to successive derivatives of periodic functions by iterated splines. *SIAM Journal on Numerical Analysis*, 25(6):1442–1452, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sidilkover:1993:MSS

[SB93] David Sidilkover and Achi Brandt. Multigrid solution to steady-state two-dimensional conservation laws. *SIAM Journal on Numerical Analysis*, 30(1):249–274, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Smith:1991:SGM

[SBBL91] Ralph C. Smith, Gary A. Bogar, Kenneth L. Bowers, and John Lund. The Sinc–Galerkin method for fourth-order differential equations. *SIAM Journal on Numerical Analysis*, 28(3):760–788, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1972:PEE

[SC72] A. H. Stroud and Kwan-Wei Chen. Peano error estimates for Gauss–Laguerre quadrature formulas. *SIAM Journal on Numerical Analysis*, 9 (2):333–340, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schwetlick:1987:HOP

[SC87] Hubert Schwetlick and Jürgen Cleve. Higher order predictors and adaptive steplength control in path following algorithms. *SIAM Journal on Numerical Analysis*, 24(6):1382–1393, December 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schoenberg:1965:MLD

[Sch65] I. J. Schoenberg. On monosplines of least deviation and best quadrature formulae. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):144–170, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Schoenberg:1966:MLS

[Sch66] I. J. Schoenberg. On monosplines of least square deviation and best quadrature formulae II. *SIAM Journal on Numerical Analysis*, 3(2): 321–328, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schechter:1968:RMC

[Sch68a] Samuel Schechter. Relaxation methods for convex problems. *SIAM Journal on Numerical Analysis*, 5(3):601–612, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schumaker:1968:UAC

[Sch68b] Larry Schumaker. Uniform approximation by Chebyshev spline functions. II: Free knots. *SIAM Journal on Numerical Analysis*, 5(4):647–

656, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schultz:1969:ATE

[Sch69a] Martin H. Schultz. L^2-approximation theory of even order multivariate splines. *SIAM Journal on Numerical Analysis*, 6(3):467–475, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schultz:1969:MATb

[Sch69b] Martin H. Schultz. L^2-multivariate approximation theory. *SIAM Journal on Numerical Analysis*, 6(2):184–209, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schultz:1969:MATa

[Sch69c] Martin H. Schultz. L^∞-multivariate approximation theory. *SIAM Journal on Numerical Analysis*, 6(2):161–183, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schultz:1969:ATM

[Sch69d] Martin H. Schultz. Approximation theory of multivariate spline functions in Sobolev spaces. *SIAM Journal on Numerical Analysis*, 6(4):570–582, December 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schultz:1969:RRG

[Sch69e] Martin H. Schultz. Rayleigh–Ritz–Galerkin methods for multidimensional problems. *SIAM Journal on Numerical Analysis*, 6(4):523–538, December 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schuurmann:1969:UUA

[Sch69f] F. J. Schuurmann. Uniqueness in the uniform approximation of a function and its derivatives. *SIAM Journal on Numerical Analysis*, 6(2):305–315, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Scherer:1970:BAC

[Sch70] Karl Scherer. On the best approximation of continuous functions by splines. *SIAM Journal on Numerical Analysis*, 7(3):418–423, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schoen:1971:FSO

[Sch71a] Kenneth Schoen. Fifth and sixth order PECE algorithms with improved stability properties. *SIAM Journal on Numerical Analysis*, 8(2):

244–248, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schultz:1971:EBR

[Sch71b] Martin H. Schultz. L^2 error bounds for the Rayleigh–Ritz–Galerkin method. *SIAM Journal on Numerical Analysis*, 8(4):737–748, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schryer:1972:CAS

[Sch72] N. L. Schryer. Constructive approximation of solutions to linear elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 9(4):546–572, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schelin:1973:MCS

[Sch73] Charles W. Schelin. Monotone convergence of the sornewton iterative technique. *SIAM Journal on Numerical Analysis*, 10(5):933–938, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Scherer:1974:CGL

[Sch74] Karl Scherer. Characterization of generalized Lipschitz classes by best approximation with splines. *SIAM Journal on Numerical Analysis*, 11(2): 283–304, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schaback:1979:SEA

[Sch79] Robert Schaback. Suboptimal exponential approximations. *SIAM Journal on Numerical Analysis*, 16(6):1007–1018, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schreiber:1980:FEM

[Sch80] Robert Schreiber. Finite element methods of high-order accuracy for singular two-point boundary value problems with nonsmooth solutions. *SIAM Journal on Numerical Analysis*, 17(4):547–566, August 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schonhage:1982:RAR

[Sch82] Arnold Schönhage. Rational approximation to e^{-x} and related $\mathcal{L}^2$-problems. *SIAM Journal on Numerical Analysis*, 19(5):1067–1080, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schelin:1983:CZR

[Sch83a] Charles W. Schelin. Counting zeros of real polynomials within the unit disk. *SIAM*

Journal on Numerical Analysis, 20(5):1023–1031, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schumaker:1983:SPQ

[Sch83b] Larry L. Schumaker. On shape preserving quadratic spline interpolation. *SIAM Journal on Numerical Analysis*, 20(4):854–864, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schwartz:1983:ERE

[Sch83c] Ira Bruce Schwartz. Estimating regions of existence of unstable periodic orbits using computer-based techniques. *SIAM Journal on Numerical Analysis*, 20(1):106–120, February 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schwandt:1985:KLA

[Sch85] Hartmut Schwandt. Krawczyk-like algorithms for the solution of systems of nonlinear equations. *SIAM Journal on Numerical Analysis*, 22(4): 792–810, August 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schwandt:1986:AGC

[Sch86] Hartmut Schwandt. Almost globally convergent interval methods for discretizations of nonlinear elliptic partial differential equations. *SIAM Journal on Numerical Analysis*, 23(2):304–324, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schumaker:1989:SSF

[Sch89a] Larry L. Schumaker. On super splines and finite elements. *SIAM Journal on Numerical Analysis*, 26(4):997–1005, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schwandt:1989:CRT

[Sch89b] Hartmut Schwandt. Cyclic reduction for tridiagonal systems of equations with interval coefficients on vector computers. *SIAM Journal on Numerical Analysis*, 26(3): 661–680, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schmitt:1990:AAM

[Sch90a] Bernhard A. Schmitt. An algebraic approximation for the matrix exponential in singularly perturbed boundary value problems. *SIAM Journal on Numerical Analysis*, 27(1):51–66, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schochet:1990:RCS

[Sch90b] S. Schochet. The rate of convergence of spectral-viscosity methods for periodic scalar conservation laws. *SIAM Journal on Numerical Analysis*, 27(5):1142–1159, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schecter:1993:NCS

[Sch93] Stephen Schecter. Numerical computation of saddle-node homoclinic bifurcation points. *SIAM Journal on Numerical Analysis*, 30(4):1155–1178, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schroll:1996:CIF

[Sch96] H. J. Schroll. Convergence of implicit finite difference methods applied to nonlinear mixed systems. *SIAM Journal on Numerical Analysis*, 33 (3):997–1013, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schaeffer:1998:CDS

[Sch98a] Jack Schaeffer. Convergence of a difference scheme for the Vlasov–Poisson–Fokker–Planck system in one dimension. *SIAM Journal on Numerical Analysis*, 35 (3):1149–1175, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30255`.

Schneider:1998:IFD

[Sch98b] Claus B. Schneider. Inversion formulas for the discretized Hilbert transform on the unit circle. *SIAM Journal on Numerical Analysis*, 35(1):71–77, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28514`.

Scott:1975:IBC

[Sco75] Ridgway Scott. Interpolated boundary conditions in the finite element method. *SIAM Journal on Numerical Analysis*, 12(3):404–427, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Scott:1981:SSS

[Sco81] David S. Scott. Solving sparse symmetric generalized eigenvalue problems without factorization. *SIAM Journal on Numerical Analysis*, 18(1): 102–110, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Scroggs:1991:PMD

[Scr91] Jeffrey S. Scroggs. A physically motivated domain decomposition for singularly perturbed equations. *SIAM Journal on Numerical Analysis*, 28(1):168–178, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Scuderi:1998:CMG

[Scu98] L. Scuderi. A collocation method for the generalized airfoil equation for an airfoil with a flap. *SIAM Journal on Numerical Analysis*, 35 (5):1725–1739, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32440`.

Stroud:1971:SST

[SCWM71] A. H. Stroud, Kwan-Wei Chen, Ping-Lei Wang, and Zunkwang Mao. Some second and third degree harmonic interpolation formulas. *SIAM Journal on Numerical Analysis*, 8(4):681–692, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sacks-Davis:1977:SSO

[SD77] R. Sacks-Davis. Solution of stiff ordinary differential equations by a second derivative method. *SIAM Journal on Numerical Analysis*, 14(6): 1088–1100, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Santos:1988:FEM

[SDC88] Juan Enrique Santos, Jim Douglas, Jr., and Alberto Pedro Calderón. Finite element methods for a composite model in elastodynamics. *SIAM Journal on Numerical Analysis*, 25(3):513–532, June 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schreiber:1981:FEM

[SE81] Robert Schreiber and Stanley C. Eisenstat. Finite element methods for spherically symmetric elliptic equations. *SIAM Journal on Numerical Analysis*, 18(3):546–558, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Secrest:1965:EBI

[Sec65a] Don Secrest. Error bounds for interpolation and differentiation by the use of spline functions. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(3):440–447, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Secrest:1965:NIA

[Sec65b] Don Secrest. Numerical integration of arbitrarily spaced data and estimation of errors. *Journal of the Society for Industrial and Applied Mathematics: Series B,* *Numerical Analysis*, 2(1):52–68, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Segethova:1972:NCH

[Seg72] Jitka Segethova. Numerical construction of the Hill functions. *SIAM Journal on Numerical Analysis*, 9(2): 199–204, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Seidman:1996:OFB

[Sei96] Thomas I. Seidman. Optimal filtering for the backward heat equation. *SIAM Journal on Numerical Analysis*, 33(1): 162–170, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Scherzer:1993:OPP

[SEK93] O. Scherzer, H. W. Engl, and K. Kunisch. Optimal A posteriori parameter choice for Tikhonov regularization for solving nonlinear ill-posed problems. *SIAM Journal on Numerical Analysis*, 30(6): 1796–1838, December 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Semper:1992:CFE

[Sem92] Bill Semper. Conforming finite element approximations for a fourth-order singular perturbation problem. *SIAM Journal on Numerical Analysis*, 29(4):1043–1058, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sermer:1983:GME

[Ser83] Pavol Sermer. A Galerkin method for elliptic-hyperbolic type equations. *SIAM Journal on Numerical Analysis*, 20 (3):471–484, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Serra:1999:HCB

[Ser99] Stefano Serra. How to choose the best iterative strategy for symmetric Toeplitz systems. *SIAM Journal on Numerical Analysis*, 36(4): 1078–1103, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31186`.

Sewell:1966:ILC

[Sew66a] W. E. Sewell. Integrated Lipschitz conditions and approximation in the mean by interpolating polynomials. *SIAM Journal on Numerical Analysis*, 3(2):329–343, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sewell:1966:RMR

[Sew66b] W. E. Sewell. Remarks on the mathematical researches of J. L. Walsh. *SIAM Journal on Numerical Analysis*, 3 (2):344–348, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Smith:1979:ALL

[SF79] David A. Smith and William F. Ford. Acceleration of linear and logarithmic convergence. *SIAM Journal on Numerical Analysis*, 16(2): 223–240, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schnabel:1984:TMN

[SF84] Robert B. Schnabel and Paul D. Frank. Tensor methods for nonlinear equations. *SIAM Journal on Numerical Analysis*, 21(5):815–843, October 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sidi:1986:ACV

[SFS86] Avram Sidi, William F. Ford, and David A. Smith. Acceleration of convergence of vector sequences. *SIAM Journal on Numerical Analysis*, 23(1): 178–196, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1968:SEI

[SG68] A. H. Stroud and Edward H. Goit, Jr. Some extensions of integration formulas. *SIAM Journal on Numerical Analysis*, 5(2):243–251, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stein:1966:ASR

[SH66] F. Max Stein and R. G. Huffstutler. The approximate solution of Riccati's equation. *SIAM Journal on Numerical Analysis*, 3(3):425–434, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stuart:1995:ESL

[SH95] A. M. Stuart and A. R. Humphries. The essential stability of local error control for dynamical systems. *SIAM Journal on Numerical Analysis*, 32(6):1940–1971, December 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shampine:1966:MIT

[Sha66] L. F. Shampine. Monotone iterations and two-sided convergence. *SIAM Journal on Numerical Analysis*, 3 (4):607–615, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shampine:1968:BVP

[Sha68] L. F. Shampine. Boundary value problems for ordinary differential equations. *SIAM*

Journal on Numerical Analysis, 5(2):219–242, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shampine:1969:BVP

[Sha69] L. F. Shampine. Boundary value problems for ordinary differential equations. II: Patch bases and monotone methods. *SIAM Journal on Numerical Analysis*, 6 (3):414–431, September 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shanno:1970:PSM

[Sha70] D. F. Shanno. Parameter selection for modified Newton methods for function minimization. *SIAM Journal on Numerical Analysis*, 7 (3):366–372, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shafer:1974:QA

[Sha74] R. E. Shafer. On quadratic approximation. *SIAM Journal on Numerical Analysis*, 11 (2):447–460, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shanno:1978:CNC

[Sha78] D. F. Shanno. On the convergence of a new conjugate gradient algorithm. *SIAM Journal on Numerical Analysis*, 15(6):1247–1257, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shampine:1985:IRK

[Sha85a] Lawrence F. Shampine. Interpolation for Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 22 (5):1014–1027, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shapiro:1985:OBD

[Sha85b] Alexander Shapiro. Optimal block diagonal L_2-scaling of matrices. *SIAM Journal on Numerical Analysis*, 22(1): 81–94, February 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shary:1995:OSI

[Sha95] Sergey P. Shary. On optimal solution of interval linear equations. *SIAM Journal on Numerical Analysis*, 32 (2):610–630, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sherman:1978:NIM

[She78] Andrew H. Sherman. On newton-iterative methods for the solution of systems of nonlinear equations. *SIAM Journal on Numerical Analysis*, 15(4):755–771, August 1978.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shen:1992:EEP

[She92] Jie Shen. On error estimates of projection methods for Navier–Stokes equations: First-order schemes. *SIAM Journal on Numerical Analysis*, 29(1):57–77, February 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shen:1995:EEP

[She95] Jie Shen. On error estimates of the penalty method for unsteady Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 32(2):386–403, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shen:1996:BFD

[She96] Jian Shen. A block finite difference scheme for second-order elliptic problems with discontinuous coefficients. *SIAM Journal on Numerical Analysis*, 33(2):686–706, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shisha:1966:IPC

[Shi66] O. Shisha. On infrapolynomials with prescribed center of gravity of their zeros. *SIAM Journal on Numerical Analysis*, 3(2):349–354, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Showalter:1975:PEE

[Sho75] R. E. Showalter. *A Priori* error estimates for approximation of parabolic boundary value problems. *SIAM Journal on Numerical Analysis*, 12(3):456–463, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shreve:1973:IEE

[Shr73] David C. Shreve. Interior estimates in l^p for elliptic difference operators. *SIAM Journal on Numerical Analysis*, 10(1):69–80, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sun:1996:FDP

[SHR96] Weiwei Sun, Weizhang Huang, and Robert D. Russell. Finite difference preconditioning for solving orthogonal collocation equations for boundary value problems. *SIAM Journal on Numerical Analysis*, 33(6):2268–2285, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24976`.

Shubert:1972:SMS

[Shu72] Bruno O. Shubert. A sequential method seeking the global maximum of a function. *SIAM Journal on Numerical Analysis*, 9(3):379–388, September 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Strang:1983:BS

[SI83] Gilbert Strang and Arieh Iserles. Barriers to stability. *SIAM Journal on Numerical Analysis*, 20(6):1251–1257, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sidi:1986:CSP

[Sid86] Avram Sidi. Convergence and stability properties of minimal polynomial and reduced rank extrapolation algorithms. *SIAM Journal on Numerical Analysis*, 23(1):197–209, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sidi:1997:CCS

[Sid97] Avram Sidi. A complete convergence and stability theory for a generalized Richardson extrapolation process. *SIAM Journal on Numerical Analysis*, 34(5):1761–1778, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27858.

Sigillito:1976:PIA

[Sig76] Vincent G. Sigillito. *A Priori* inequalities and approximate solutions of the first boundary value problem for $\Delta^2 u = f$. *SIAM Journal on Numerical Analysis*, 13(2):251–260, April 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Simpson:1968:AME

[Sim68] R. Bruce Simpson. Approximation of the minimizing element for a class of functionals. *SIAM Journal on Numerical Analysis*, 5(1):26–41, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Simpson:1969:RRP

[Sim69] R. B. Simpson. The Rayleigh–Ritz process for the simplest problem in the calculus of variations. *SIAM Journal on Numerical Analysis*, 6(2):258–271, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Simpson:1971:FDM

[Sim71] R. B. Simpson. Finite difference methods for mildly nonlinear eigenvalue problems. *SIAM Journal on Numerical*

Analysis, 8(2):190–211, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Simpson:1975:MND

[Sim75] R. B. Simpson. A method for the numerical determination of bifurcation states of nonlinear systems of equations. *SIAM Journal on Numerical Analysis*, 12(3):439–451, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sinclair:1973:DEF

[Sin73] Annette Sinclair. Determination of extremal functions in H^p by a Fortran program. *SIAM Journal on Numerical Analysis*, 10(1):137–146, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sincovec:1977:REH

[Sin77] R. F. Sincovec. On the relative efficiency of higher order collocation methods for solving two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 14(1):112–123, March 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Skeel:1977:CNM

[SJ77] R. D. Skeel and L. W. Jackson. Consistency of Nordsieck methods. *SIAM Journal on Numerical Analysis*, 14(5):910–924, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Skeel:1983:SVS

[SJ83] R. D. Skeel and L. W. Jackson. The stability of variable-stepsize Nordsieck methods. *SIAM Journal on Numerical Analysis*, 20(4):840–853, August 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sloan:1987:LMM

[SK87] Ian H. Sloan and Philip J. Kachoyan. Lattice methods for multiple integration: theory, error analysis and examples. *SIAM Journal on Numerical Analysis*, 24(1):116–128, February 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shroff:1993:SUP

[SK93] Gautam M. Shroff and Herbert B. Keller. Stabilization of unstable procedures: The recursive projection method. *SIAM Journal on Numerical Analysis*, 30(4):1099–1120, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Skeel:1976:AFS

[Ske76] Robert Skeel. Analysis of fixed-stepsize methods. *SIAM Journal on Numerical Analysis*, 13(5):664–685, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Skeel:1981:EER

[Ske81] Robert D. Skeel. Effect of equilibration on residual size for partial pivoting. *SIAM Journal on Numerical Analysis*, 18(3):449–454, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Skeel:1982:TFP

[Ske82] Robert D. Skeel. A theoretical framework for proving accuracy results for deferred corrections. *SIAM Journal on Numerical Analysis*, 19(1):171–196, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Skeel:1986:OAD

[Ske86] Robert D. Skeel. The order of accuracy for deferred corrections using uncentered end formulas. *SIAM Journal on Numerical Analysis*, 23(2):393–402, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sidi:1983:PPT

[SL83a] Avram Sidi and David Levin. Prediction properties of the t-transformation. *SIAM Journal on Numerical Analysis*, 20(3):589–598, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sidi:1983:ZSP

[SL83b] Avram Sidi and Doron S. Lubinsky. On the zeros of some polynomials that arise in numerical quadrature and convergence acceleration. *SIAM Journal on Numerical Analysis*, 20(2):400–405, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Slepian:1968:NMD

[Sle68] David Slepian. A numerical method for determining the eigenvalues and eigenfunctions of analytic kernels. *SIAM Journal on Numerical Analysis*, 5(3):586–600, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Slepian:1982:SCI

[Sle82] David Slepian. Solution of certain integral equations with difference kernels. *SIAM Journal on Numerical Analysis*, 19(3):614–622, June 1982. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic).

Sloan:1976:IGM

[Slo76] Ian H. Sloan. Iterated Galerkin method for eigenvalue problems. *SIAM Journal on Numerical Analysis*, 13(5):753–760, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schmidt:1975:BSA

[SLW75] Eckard Schmidt, Peter Lancaster, and David Watkins. Bases of splines associated with constant coefficient differential operators. *SIAM Journal on Numerical Analysis*, 12(4):630–645, September 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sermer:1981:LSM

[SM81] Pavol Sermer and Rudolf Mathon. Least-squares methods for mixed-type equations. *SIAM Journal on Numerical Analysis*, 18(4):705–723, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saito:1996:SAN

[SM96] Yoshihiro Saito and Taketomo Mitsui. Stability analysis of numerical schemes for stochastic differential equations. *SIAM Journal on Numerical Analysis*, 33(6):2254–2267, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22840`.

Small:1988:GFM

[Sma88] R. D. Small. The generating function method of nonlinear approximation. *SIAM Journal on Numerical Analysis*, 25(1):235–244, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Smith:1968:CEA

[Smi68] Julius Smith. The coupled equation approach to the numerical solution of the biharmonic equation by finite differences. I. *SIAM Journal on Numerical Analysis*, 5(2):323–339, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Smith:1970:CEA

[Smi70] Julius Smith. The coupled equation approach to the numerical solution of the biharmonic equation by finite differences. II. *SIAM Journal on Numerical Analysis*, 7(1):104–111, March 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Smith:1973:ASF

[Smi73] Julius Smith. On the approximate solution of the first boundary value problem for $\nabla^4 u = f$. *SIAM Journal on Numerical Analysis*, 10 (6):967–982, December 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Smith:1981:BLA

[Smi81] Donald R. Smith. On boundary layer approximations in the numerical solution of certain stiff boundary value problems. *SIAM Journal on Numerical Analysis*, 18(3): 377–380, June 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Smooke:1983:EEP

[Smo83] Mitchell D. Smooke. Error estimates for piecewise perturbation series solutions of the radial Schrödinger equation. *SIAM Journal on Numerical Analysis*, 20(2): 279–295, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sneddon:1996:SOS

[Sne96] G. E. Sneddon. Second-order spectral differentiation matrices. *SIAM Journal on Numerical Analysis*, 33(6): 2468–2487, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26423`.

Snider:1972:IEA

[Sni72] Arthur D. Snider. An improved estimate of the accuracy of trigonometric interpolation. *SIAM Journal on Numerical Analysis*, 9(3):505–508, September 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stynes:1986:UAF

[SO86] Martin Stynes and Eugene O'Riordan. A uniformly accurate finite element method for a singular perturbation problem in conservative form. *SIAM Journal on Numerical Analysis*, 23(2): 369–375, April 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sofroniou:1997:SRK

[SO97] M. Sofroniou and W. Oevel. Symplectic Runge–Kutta schemes. I. Order conditions. *SIAM Journal on Numerical Analysis*, 34(5):2063–2086, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28102`.

Sobol:1979:ESS

[Sob79a] I. M. Sobol'. Erratum: “On the Systematic Search in a Hypercube” [SIAM J. Numer. Anal. **16** (1979), no. 5, 790–793, MR 80f:65072]. *SIAM Journal on Numerical Analysis*, 16(6):1080, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [Sob79b].

Sobol:1979:SSH

[Sob79b] I. M. Sobol'. On the systematic search in a hypercube. *SIAM Journal on Numerical Analysis*, 16(5):790–793, October 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See erratum [Sob79a].

Sonar:1998:FPO

[Son98] Thomas Sonar. On families of pointwise optimal finite volume ENO approximations. *SIAM Journal on Numerical Analysis*, 35(6): 2350–2369, December 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31601`.

Sorensen:1980:SCC

[Sor80] D. C. Sorensen. The Q-superlinear convergence of a collinear scaling algorithm for unconstrained optimization. *SIAM Journal on Numerical Analysis*, 17(1):84–114, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sorensen:1982:NMM

[Sor82] D. C. Sorensen. Newton's method with a model trust region modification. *SIAM Journal on Numerical Analysis*, 19(2):409–426, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sharma:1968:AHB

[SP68] A. Sharma and J. Prasad. On Abel–Hermite–Birkhoff interpolation. *SIAM Journal on Numerical Analysis*, 5 (4):864–881, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schreiber:1988:BRT

[SP88] Robert Schreiber and Beresford N. Parlett. Block reflectors: Theory and computation. *SIAM Journal on Numerical Analysis*, 25(1):189–205, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). Cited in [**?**].

Smith:1992:ONI

[SP92] William E. Smith and David Paget. Optimal nodes for interpolatory product integration. *SIAM Journal on Numerical Analysis*, 29(2):

586–600, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sweldens:1994:QFA

[SP94] Wim Sweldens and Robert Piessens. Quadrature formulae and asymptotic error expansions for wavelet approximations of smooth functions. *SIAM Journal on Numerical Analysis*, 31(4):1240–1264, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Spanier:1971:NMP

[Spa71] Jerome Spanier. A new multistage procedure for systematic variance reduction in Monte Carlo. *SIAM Journal on Numerical Analysis*, 8 (3):548–554, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Spinelli:1965:PES

[Spi65] R. A. Spinelli. Poisson equation on a sphere. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(3): 489–499, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Spinelli:1966:NIL

[Spi66] R. A. Spinelli. Numerical inversion of a Laplace transform. *SIAM Journal on Numerical Analysis*, 3(4):636–649, December 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Spinelli:1967:PES

[Spi67] R. A. Spinelli. Poisson equation on a sphere. II. *SIAM Journal on Numerical Analysis*, 4(3):465–473, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Spijker:1971:RRE

[Spi71] M. N. Spijker. Reduction of roundoff error by splitting of difference formulas. *SIAM Journal on Numerical Analysis*, 8(2):345–357, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Spouge:1994:CGD

[Spo94] John L. Spouge. Computation of the gamma, digamma, and trigamma functions. *SIAM Journal on Numerical Analysis*, 31(3):931–944, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1965:QFM

[SS65] A. H. Stroud and D. D. Stancu. Quadrature formulas with multiple Gaussian nodes. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):129–

143, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Swarztrauber:1973:DSD

[SS73] Paul N. Swarztrauber and Roland A. Sweet. The direct solution of the discrete Poisson equation on a disk. *SIAM Journal on Numerical Analysis*, 10(5):900–907, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Soderstrom:1974:NPI

[SS74] Torsten Söderström and G. W. Stewart. On the numerical properties of an iterative method for computing the Moore–Penrose generalized inverse. *SIAM Journal on Numerical Analysis*, 11 (1):61–74, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Smith:1980:PIR

[SS80] William E. Smith and Ian H. Sloan. Product-integration rules based on the zeros of Jacobi polynomials. *SIAM Journal on Numerical Analysis*, 17(1):1–13, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sloan:1982:PIP

[SS82] Ian H. Sloan and William E. Smith. Properties of interpolatory product integration rules. *SIAM Journal on Numerical Analysis*, 19(2):427–442, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stephens:1983:EUE

[SS83] A. B. Stephens and G. R. Shubin. Existence and uniqueness for an exponentially derived switching scheme. *SIAM Journal on Numerical Analysis*, 20(5):885–889, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sanz-Serna:1988:NMP

[SS88] J. M. Sanz-Serna. A numerical method for a partial integro-differential equation. *SIAM Journal on Numerical Analysis*, 25(2):319–327, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Scott:1989:EMD

[SS89] Larkin B. Scott and L. Ridgway Scott. Efficient methods for data smoothing. *SIAM Journal on Numerical Analysis*, 26(3):681–692, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saranen:1993:QMS

[SS93] J. Saranen and L. Schroderus. Quadrature methods for strongly elliptic equations of negative order on smooth closed curves. *SIAM Journal on Numerical Analysis*, 30(6): 1769–1795, December 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saranen:1995:SDM

[SS95] J. Saranen and L. Schroderus. Some discrete methods for boundary integral equations on smooth closed curves. *SIAM Journal on Numerical Analysis*, 32(5):1535–1564, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schwab:1996:OVA

[SS96a] Christoph Schwab and Manil Suri. The optimal *p*-version approximation of singularities on polyhedra in the boundary element method. *SIAM Journal on Numerical Analysis*, 33 (2):729–759, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shub:1996:CBT

[SS96b] Michael Shub and Steve Smale. Complexity of Bezout's theorem. IV. probability of success and extensions. *SIAM Journal on Numerical Analysis*, 33(1):128–148, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stenberg:1997:EAM

[SS97] Rolf Stenberg and Manil Suri. An *h*-*p* error analysis of MITC plate elements. *SIAM Journal on Numerical Analysis*, 34(2):544–568, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27848`.

Schiff:1999:NAN

[SS99] Jeremy Schiff and S. Shnider. A natural approach to the numerical integration of Riccati differential equations. *SIAM Journal on Numerical Analysis*, 36(5):1392–1413, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30794`.

Sanz-Serna:1984:ICN

[SSA84] J. M. Sanz-Serna and L. Abia. Interpolation of the coefficients in nonlinear elliptic Galerkin procedures. *SIAM Journal on Numerical Analysis*, 21(1):77–83, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sanz-Serna:1991:OCC

[SSA91] J. M. Sanz-Serna and L. Abia. Order conditions for canonical Runge–Kutta schemes. *SIAM Journal on Numer-*

ical Analysis, 28(4):1081–1096, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shultz:1985:FTR

[SSB85] Gerald A. Shultz, Robert B. Schnabel, and Richard H. Byrd. A family of trust-region-based algorithms for unconstrained minimization with strong global convergence properties. *SIAM Journal on Numerical Analysis*, 22(1):47–67, February 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schatz:1996:SFE

[SSW96] A. H. Schatz, I. H. Sloan, and L. B. Wahlbin. Superconvergence in finite element methods and meshes that are locally symmetric with respect to a point. *SIAM Journal on Numerical Analysis*, 33(2): 505–521, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saunders:1988:TCG

[SSY88] M. A. Saunders, H. D. Simon, and E. L. Yip. Two conjugate-gradient-type methods for unsymmetric linear equations. *SIAM Journal on Numerical Analysis*, 25(4): 927–940, August 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sweezy:1967:ESC

[ST67] W. B. Sweezy and W. J. Thron. Estimates of the speed of convergence of certain continued fractions. *SIAM Journal on Numerical Analysis*, 4 (2):254–270, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schumaker:1969:APH

[ST69] L. L. Schumaker and G. D. Taylor. On approximation by polynomials having restricted ranges. II. *SIAM Journal on Numerical Analysis*, 6(1): 31–36, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sharma:1976:CPS

[ST76] A. Sharma and J. Tzimbalario. Cardinal t-perfect L-splines. *SIAM Journal on Numerical Analysis*, 13(6):915–922, December 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saigal:1978:EAT

[ST78] R. Saigal and M. J. Todd. Efficient acceleration techniques for fixed point algorithms. *SIAM Journal on Numerical Analysis*, 15(5):997–1007, October 1978. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Sloan:1986:TDI

[ST86] I. H. Sloan and V. Thomée. Time discretization of an integro-differential equation of parabolic type. *SIAM Journal on Numerical Analysis*, 23(5):1052–1061, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sorensen:1991:OEC

[ST91] D. C. Sorensen and Ping Tak Peter Tang. On the orthogonality of eigenvectors computed by divide and conquer techniques. *SIAM Journal on Numerical Analysis*, 28(6):1752–1775, December 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sugiura:1992:PIQ

[ST92] Hiroshi Sugiura and Tatsuo Torii. Polynomial interpolation on quasi-equidistributed nodes on the unit disk. *SIAM Journal on Numerical Analysis*, 29(4):1154–1165, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shen:1995:NGM

[ST95] Jie Shen and Roger Temam. Nonlinear Galerkin method using Chebyshev and Legendre polynomials. I. the one-dimensional case. *SIAM Journal on Numerical Analysis*, 32(1):215–234, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stancu:1964:RCL

[Sta64] D. D. Stancu. The remainder of certain linear approximation formulas in two variables. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??):137–163, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic).

Starke:1991:OAD

[Sta91] Gerhard Starke. Optimal alternating direction implicit parameters for nonsymmetric systems of linear equations. *SIAM Journal on Numerical Analysis*, 28(5):1431–1445, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Starke:1999:MBF

[Sta99] Gerhard Starke. Multilevel boundary functionals for least-squares mixed finite element methods. *SIAM Journal on Numerical Analysis*, 36(4):1065–1077, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32980`.

Stetter:1965:SSW

[Ste65a] Hans J. Stetter. A study of strong and weak stability in discretization algorithms. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2):265–280, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Steward:1965:PTS

[Ste65b] Donald V. Steward. Partitioning and tearing systems of equations. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2): 345–365, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Stenger:1968:KPE

[Ste68] Frank Stenger. Kronecker product extensions of linear operators. *SIAM Journal on Numerical Analysis*, 5(2): 422–435, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stewart:1970:CER

[Ste70] N. F. Stewart. Certain equivalent requirements of approximate solutions of $x' = f(t, x)$. *SIAM Journal on Numerical Analysis*, 7(2):256–270, June 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stepleman:1971:FDA

[Ste71a] Robert S. Stepleman. Finite-dimensional analogues of variational problems in the plane. *SIAM Journal on Numerical Analysis*, 8(1):11–23, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stetter:1971:LEG

[Ste71b] Hans J. Stetter. Local estimation of the global discretization error. *SIAM Journal on Numerical Analysis*, 8 (3):512–523, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stewart:1971:EBA

[Ste71c] G. W. Stewart. Error bounds for approximate invariant subspaces, of closed linear operator. *SIAM Journal on Numerical Analysis*, 8(4):796–808, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stewart:1972:SEP

[Ste72] G. W. Stewart. On the sensitivity of the eigenvalue problem $Ax = \lambda Bx$. *SIAM Journal on Numerical Analysis*, 9 (4):669–686, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stewart:1974:CMI

[Ste74] G. W. Stewart. The convergence of multipoint iterations to multiple zeros. *SIAM Journal on Numerical Analysis*, 11(6):1105–1120, December 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stenger:1975:AFW

[Ste75a] Frank Stenger. An analytic function which is an approximate characteristic function. *SIAM Journal on Numerical Analysis*, 12(2): 239–254, April 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stepleman:1975:CLC

[Ste75b] Robert S. Stepleman. A characterization of local convergence for fixed point iterations in R^1. *SIAM Journal on Numerical Analysis*, 12 (6):887–894, December 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stephens:1976:CRP

[Ste76] A. B. Stephens. The convergence of the residual for projective approximations. *SIAM Journal on Numerical Analysis*, 13(4):607–614, September 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stewart:1977:PBF

[Ste77] G. W. Stewart. Perturbation bounds for the QR factorization of a matrix. *SIAM Journal on Numerical Analysis*, 14 (3):509–518, June 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stetter:1979:IEE

[Ste79a] Hans J. Stetter. Interpolation and error estimation in Adams PC-codes. *SIAM Journal on Numerical Analysis*, 16(2):311–323, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Steuerwalt:1979:ECN

[Ste79b] Michael Steuerwalt. The existence, computation, and number of solutions of periodic parabolic problems. *SIAM Journal on Numerical Analysis*, 16(3):402–420, June 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stewart:1980:EGR

[Ste80] G. W. Stewart. The efficient generation of random orthogonal matrices with an application to condition estimators. *SIAM Journal on Numerical Analysis*, 17(3):403–409 (loose microfiche supplement), June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Steihaug:1983:CGM

[Ste83] Trond Steihaug. The conjugate gradient method and trust regions in large scale optimization. *SIAM Journal on Numerical Analysis*, 20(3): 626–637, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stiefel:1964:MON

[Sti64] E. Stiefel. Methods — old and new — for solving the Tchebycheff approximation problem. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??): 164–176, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic).

Stone:1968:ISI

[Sto68] Herbert L. Stone. Iterative solution of implicit approximations of multidimensional partial differential equations. *SIAM Journal on Numerical Analysis*, 5 (3):530–558, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stoer:1971:NSC

[Sto71] Josef Stoer. On the numerical solution of constrained least-squares problems. *SIAM Journal on Numerical Analysis*, 8(2):382–411, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stoutemyer:1973:NIS

[Sto73] David R. Stoutemyer. Numerical implementation of the Schwarz alternating procedure for elliptic partial differential equations. *SIAM Journal on Numerical Analysis*, 10 (2):308–326, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Strang:1965:UPD

[Str65a] Gilbert Strang. Unbalanced polynomials and difference methods for mixed problems. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(1):46–51, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Stroud:1965:EER

[Str65b] A. H. Stroud. Error estimates for Romberg quadrature. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(3):480–488, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Stroud:1966:EQE

[Str66] A. H. Stroud. Estimating quadrature errors for functions with low continuity. *SIAM Journal on Nu-*

merical Analysis, 3(3):420–424, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1967:IFO

[Str67a] A. H. Stroud. Integration formulas and orthogonal polynomials. *SIAM Journal on Numerical Analysis*, 4(3):381–389, September 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1967:SSD

[Str67b] A. H. Stroud. Some seventh degree integration formulas for symmetric regions. *SIAM Journal on Numerical Analysis*, 4(1):37–44, March 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Strang:1968:CCD

[Str68] Gilbert Strang. On the construction and comparison of difference schemes. *SIAM Journal on Numerical Analysis*, 5(3):506–517, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1969:FDI

[Str69a] A. H. Stroud. A fifth degree integration formula for the n-simplex. *SIAM Journal on Numerical Analysis*, 6 (1):90–98, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1969:IFO

[Str69b] A. H. Stroud. Integration formulas and orthogonal polynomials for two variables. *SIAM Journal on Numerical Analysis*, 6(2):222–229, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1970:IFO

[Str70] A. H. Stroud. Integration formulas and orthogonal polynomials. II. *SIAM Journal on Numerical Analysis*, 7(2): 271–276, June 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1972:TFD

[Str72] A. H. Stroud. Two fifth degree harmonic interpolation formulas for the n-box. *SIAM Journal on Numerical Analysis*, 9(3):518–521, September 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1973:SCF

[Str73] A. H. Stroud. Some cubature formulas for the surface of the n-sphere. *SIAM Journal on Numerical Analysis*, 10(4):559–569, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Strand:1974:TMR

[Str74] Otto Neall Strand. Theory and methods related to the singular-function expansion and Landweber's iteration for integral equations of the first kind. *SIAM Journal on Numerical Analysis*, 11 (4):798–825, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Strom:1975:LN

[Str75a] Torsten Strom. On logarithmic norms. *SIAM Journal on Numerical Analysis*, 12(5): 741–753, October 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stroud:1975:SIF

[Str75b] A. H. Stroud. Some interpolation formulas for the Neumann problem for the n-sphere. *SIAM Journal on Numerical Analysis*, 12(4):593–604, September 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Strikwerda:1984:IMS

[Str84] John C. Strikwerda. An iterative method for solving finite difference approximations to the Stokes equations. *SIAM Journal on Numerical Analysis*, 21(3):447–458, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Stummel:1979:GPT

[Stu79] Friedrich Stummel. The generalized patch test. *SIAM Journal on Numerical Analysis*, 16(3):449–471, June 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schroll:1997:EBS

[STW97] Hans Joachim Schroll, Aslak Tveito, and Ragnar Winther. An L^1-error bound for a semi-implicit difference scheme applied to a stiff system of conservation laws. *SIAM Journal on Numerical Analysis*, 34(3):1152–1166, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26885`.

Stynes:1989:AUC

[Sty89] Martin Stynes. An adaptive uniformly convergent numerical method for a semilinear singular perturbation problem. *SIAM Journal on Numerical Analysis*, 26(2): 442–455, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Suli:1991:CFV

[Sül91] Endre Süli. Convergence of finite volume schemes for Poisson's equation on nonuniform meshes. *SIAM Journal on Numerical Analysis*, 28

(5):1419–1430, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sun:1979:FEM

[Sun79] Tze Chien Sun. A finite element method for random differential equations with random coefficients. *SIAM Journal on Numerical Analysis*, 16(6):1019–1035, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sun:1983:PAG

[Sun83] Ji Guang Sun. Perturbation analysis for the generalized singular value problem. *SIAM Journal on Numerical Analysis*, 20(3):611–625, June 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sun:1996:BIA

[Sun96] W. Sun. Block iterative algorithms for solving Hermite bicubic collocation equations. *SIAM Journal on Numerical Analysis*, 33(2): 589–601, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sun:1999:SAH

[Sun99] Weiwei Sun. Spectral analysis of Hermite cubic spline collocation systems. *SIAM Journal on Numerical Analysis*, 36(6):1962–1975, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32272`.

Schneider:1970:CPM

[SV70] Hans Schneider and Mathukumalli Vidyasagar. Cross-positive matrices. *SIAM Journal on Numerical Analysis*, 7(4):508–519, December 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Swartz:1973:NLI

[SV73] Blair K. Swartz and Richard S. Varga. A note on lacunary interpolation by splines. *SIAM Journal on Numerical Analysis*, 10(3):443–447, June 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sharp:1994:CIR

[SV94] P. W. Sharp and J. H. Verner. Completely imbedded Runge–Kutta pairs. *SIAM Journal on Numerical Analysis*, 31(4):1169–1190, August 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Saranen:1996:TCM

[SV96] J. Saranen and G. Vainkko. Trigonometric collocation methods with product integration for boundary integral equations on closed curves. *SIAM Journal on Numerical Analysis*, 33(4): 1577–1596, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26627`.

Strand:1968:MRE

[SW68] Otto Neall Strand and Ed R. Westwater. Minimum-RMS estimation of the numerical solution of a Fredholm integral equation of the first kind. *SIAM Journal on Numerical Analysis*, 5(2):287–295, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Swartz:1974:RBG

[SW74a] Blair Swartz and Burton Wendroff. The relation between the Galerkin and collocation methods using smooth splines. *SIAM Journal on Numerical Analysis*, 11(5): 994–996, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Swartz:1974:REF

[SW74b] Blair Swartz and Burton Wendroff. The relative efficiency of finite difference and finite element methods. I: Hyperbolic problems and splines. *SIAM Journal on Numerical Analysis*, 11(5): 979–993, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Scott:1977:CSL

[SW77] Melvin R. Scott and Herman A. Watts. Computational solution of linear two-point boundary value problems via orthonormalization. *SIAM Journal on Numerical Analysis*, 14(1):40–70, March 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sameh:1982:TMA

[SW82] Ahmed H. Sameh and John A. Wisniewski. A trace minimization algorithm for the generalized eigenvalue problem. *SIAM Journal on Numerical Analysis*, 19(6):1243–1259, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shearer:1985:SCE

[SW85] J. M. Shearer and M. A. Wolfe. Some computable existence, uniqueness, and convergence tests for nonlinear systems. *SIAM Journal on Numerical Analysis*, 22(6): 1200–1207, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Strikwerda:1988:EKM

[SW88] John C. Strikwerda and Bruce A. Wade. An extension of the Kreiss matrix theorem. *SIAM Journal on Numerical Analysis*, 25(6):1272–1278, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Suli:1991:SMC

[SW91] Endre Süli and Antony Ware. A spectral method of characteristics for hyperbolic problems. *SIAM Journal on Numerical Analysis*, 28(2): 423–445, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Scherer:1994:CAC

[SW94a] R. Scherer and W. Wendler. Complete algebraic characterization of A-Stable Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 31 (2):540–551, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Silvester:1994:FIS

[SW94b] David Silvester and Andrew Wathen. Fast iterative solution of stabilised Stokes systems Part II: Using general block preconditioners. *SIAM Journal on Numerical Analysis*, 31(5):1352–1367, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shen:1999:FAN

[SW99] Jie Shen and Shouhong Wang. A fast and accurate numerical scheme for the primitive equations of the atmosphere. *SIAM Journal on Numerical Analysis*, 36(3):719–737, June 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32477`.

Swarztrauber:1972:NSD

[Swa72] Paul N. Swarztrauber. On the numerical solution of the Dirichlet problem for a region of general shape. *SIAM Journal on Numerical Analysis*, 9 (2):300–306, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Swarztrauber:1974:DMD

[Swa74] Paul N. Swarztrauber. A direct method for the discrete solution of separable elliptic equations. *SIAM Journal on Numerical Analysis*, 11(6): 1136–1150, December 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Swarztrauber:1979:SAD

[Swa79] Paul N. Swarztrauber. On the spectral approximation of discrete scalar and vector functions on the sphere. *SIAM Journal on Numerical Anal-*

ysis, 16(6):934–949, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Swarztrauber:1981:AVF

[Swa81] Paul N. Swarztrauber. The approximation of vector functions and their derivatives on the sphere. *SIAM Journal on Numerical Analysis*, 18(2): 191–210, April 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Swartz:1988:CC

[Swa88] Blair Swartz. Conditioning collocation. *SIAM Journal on Numerical Analysis*, 25(1): 124–147, February 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Strikwerda:1990:REB

[SWB90] John C. Strikwerda, Bruce A. Wade, and Kenneth P. Bube. Regularity estimates up to the boundary for elliptic systems of difference equations. *SIAM Journal on Numerical Analysis*, 27(2):292–322, April 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Strehmel:1989:SAL

[SWC89] K. Strehmel, R. Weiner, and H. Claus. Stability analysis of linearly implicit one-step interpolation methods for stiff retarded differential equations. *SIAM Journal on Numerical Analysis*, 26 (5):1158–1174, October 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sweet:1974:GCR

[Swe74] Roland A. Sweet. A generalized cyclic reduction algorithm. *SIAM Journal on Numerical Analysis*, 11(3): 506–520, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sweet:1977:CRA

[Swe77] Roland A. Sweet. A cyclic reduction algorithm for solving block tridiagonal systems of arbitrary dimension. *SIAM Journal on Numerical Analysis*, 14(4):706–720, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Sweby:1984:HRS

[Swe84] P. K. Sweby. High resolution schemes using flux limiters for hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 21(5): 995–1011, October 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Shaw:1997:EES

[SWW97] S. Shaw, M. K. Warby, and J. R. Whiteman. Error estimates with sharp constants for a fading memory Volterra problem in linear solid viscoelasticity. *SIAM Journal on Numerical Analysis*, 34(3):1237–1254, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28434.

Symes:1980:NSI

[Sym80] W. W. Symes. Numerical stability in an inverse scattering problem. *SIAM Journal on Numerical Analysis*, 17(5): 707–732, October 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See erratum [Sym81].

Symes:1981:ENS

[Sym81] W. W. Symes. Erratum: "Numerical Stability in an Inverse Scattering Problem" [SIAM J. Numer. Anal. **17** (1980), no. 5, 707–732, MR 81k:65135]. *SIAM Journal on Numerical Analysis*, 18(4): 751–752, August 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [Sym80].

Shampine:1990:RCM

[SZ90] L. F. Shampine and W. Zhang. Rate of convergence of multistep codes started by variation of order and stepsize. *SIAM Journal on Numerical Analysis*, 27(6):1506–1518, December 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Schmeiser:1999:CMM

[SZ99] Christian Schmeiser and Alexander Zwirchmayr. Convergence of moment methods for linear kinetic equations. *SIAM Journal on Numerical Analysis*, 36(1):74–88, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/30451.

Szyld:1988:CCI

[Szy88] Daniel B. Szyld. Criteria for combining inverse and Rayleigh quotient iteration. *SIAM Journal on Numerical Analysis*, 25(6):1369–1375, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tadmor:1986:EAF

[Tad86] Eitan Tadmor. The exponential accuracy of Fourier and Chebyshev differencing methods. *SIAM Journal on Numerical Analysis*, 23(1):1–10, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tadmor:1988:CTV

[Tad88] Eitan Tadmor. Convenient total variation diminishing conditions for nonlinear difference schemes. *SIAM Journal on Numerical Analysis*, 25 (5):1002–1014, October 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tadmor:1989:CSM

[Tad89] Eitan Tadmor. Convergence of spectral methods for nonlinear conservation laws. *SIAM Journal on Numerical Analysis*, 26(1):30–44, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tadmor:1991:LEE

[Tad91] Eitan Tadmor. Local error estimates for discontinuous solutions of nonlinear hyperbolic equations. *SIAM Journal on Numerical Analysis*, 28(4):891–906, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Talay:1991:AUL

[Tal91] Denis Talay. Approximation of upper Lyapunov exponents of bilinear stochastic differential systems. *SIAM Journal on Numerical Analysis*, 28(4): 1141–1164, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tang:1998:CAO

[Tan98] Tao Tang. Convergence analysis for operator-splitting methods applied to conservation laws with stiff source terms. *SIAM Journal on Numerical Analysis*, 35(5): 1939–1968, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30892`.

Tapia:1969:WNM

[Tap69] Richard A. Tapia. The weak Newton method and boundary value problems. *SIAM Journal on Numerical Analysis*, 6(4):539–550, December 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tapia:1974:NMO

[Tap74a] R. A. Tapia. Newton's method for optimization problems with equality constraints. *SIAM Journal on Numerical Analysis*, 11(5): 874–886, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tapia:1974:NMP

[Tap74b] R. A. Tapia. Newton's method for problems with equality constraints. *SIAM Journal on Numerical Analysis*, 11(1):174–196, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tarzia:1996:NAH

[Tar96] Domingo Alberto Tarzia. Numerical analysis for the heat flux in a mixed elliptic problem to obtain a discrete steady-state two-phase Stefan problem. *SIAM Journal on Numerical Analysis*, 33 (4):1257–1265, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24018`.

Tautenhahn:1996:EER

[Tau96] Ulrich Tautenhahn. Error estimates for regularization methods in Hilbert scales. *SIAM Journal on Numerical Analysis*, 33(6): 2120–2130, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26941`.

Tavernini:1971:OSM

[Tav71] Lucio Tavernini. One-step methods for the numerical solution of Volterra functional differential equations. *SIAM Journal on Numerical Analysis*, 8(4):786–795, December 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tavernini:1977:FDA

[Tav77] Lucio Tavernini. Finite difference approximations for a class of semilinear Volterra evolution problems. *SIAM Journal on Numerical Analysis*, 14(5):931–949, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tavernini:1978:ASV

[Tav78] Lucio Tavernini. The approximate solution of Volterra differential systems with state-dependent time lags. *SIAM Journal on Numerical Analysis*, 15(5):1039–1052, October 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Taylor:1968:APH

[Tay68] G. D. Taylor. On approximation by polynomials having restricted ranges. *SIAM Journal on Numerical Analysis*, 5 (2):258–268, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Taylor:1995:CSD

[Tay95] Mark Taylor. Cubature for the sphere and the discrete spherical harmonic transform. *SIAM Journal on Numerical Analysis*, 32(2): 667–670, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Thiran:1982:WMS

[TD82] J. P. Thiran and P. Defert. Weak minimal H-sets for polynomials in two variables. *SIAM Journal on Numerical Analysis*, 19(5):1041–1050, October 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tal-Ezer:1986:SMT

[TE86] Hillel Tal-Ezer. Spectral methods in time for hyperbolic equations. *SIAM Journal on Numerical Analysis*, 23(1):11–26, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tal-Ezer:1989:SMT

[TE89] Hillel Tal-Ezer. Spectral methods in time for parabolic problems. *SIAM Journal on Numerical Analysis*, 26(1):1–11, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tai:1998:RCS

[TE98] Xue-Cheng Tai and Magne Espedal. Rate of convergence of some space decomposition methods for linear and nonlinear problems. *SIAM Journal on Numerical Analysis*, 35 (4):1558–1570, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29746`.

Teng:1992:PMC

[Ten92] Zhen Huan Teng. Particle method and its convergence for scalar conservation laws. *SIAM Journal on Numerical Analysis*, 29(4):1020–1042, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Teng:1994:AFS

[Ten94] Zhen Huan Teng. On the accuracy of fractional step methods for conservation laws in two dimensions. *SIAM Journal on Numerical Analysis*, 31(1):43–63, February 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tervo:1998:FSP

[Ter98] Jouko Tervo. An FEM scheme of a PDE system from bioreactor theory with stability results. *SIAM Journal on Numerical Analysis*, 35(3):1230–1248, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29133`.

Tewarson:1967:DMG

[Tew67] R. P. Tewarson. A direct method for generalized matrix inversion. *SIAM Journal on Numerical Analysis*, 4 (4):499–507, December 1967. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic).

Trefethen:1983:CFM

[TG83] Lloyd N. Trefethen and Martin H. Gutknecht. The Carathéodory–Fejér method for real rational approximation. *SIAM Journal on Numerical Analysis*, 20(2): 420–436, April 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tourigny:1998:NMM

[TH98] Yves Tourigny and Frank Hülsemann. A new moving mesh algorithm for the finite element solution of variational problems. *SIAM Journal on Numerical Analysis*, 35 (4):1416–1438, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31393`.

Thatcher:1978:FEM

[Tha78] R. W. Thatcher. On the finite element method for unbounded regions. *SIAM Journal on Numerical Analysis*, 15 (3):466–477, June 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Thomee:1967:GUS

[Tho67] Vidar Thomee. Generally unconditionally stable difference operators. *SIAM Journal on Numerical Analysis*, 4 (1):55–69, March 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Thomee:1968:DIS

[Tho68a] Vidar Thomee. Discrete interior Schauder estimates for elliptic difference operators. *SIAM Journal on Numerical Analysis*, 5(3):626–645, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Thompson:1968:SFD

[Tho68b] R. J. Thompson. On some functional differential equations: Existence of solutions and difference approximations. *SIAM Journal on Numerical Analysis*, 5 (3):475–487, September 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Thompson:1976:CEE

[Tho76] Russell C. Thompson. Convergence and error estimates for the method of lines for certain nonlinear elliptic and elliptic-parabolic equations. *SIAM Journal on Numerical Analysis*, 13(1):27–43, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Twizell:1984:MMP

[TK84] E. H. Twizell and A. Q. M. Khaliq. Multiderivative methods for periodic initial value problems. *SIAM Journal on Numerical Analysis*, 21(1): 111–122, February 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tian:1996:NSL

[TK96] Hong-Jiong Tian and Jiao-Xun Kuang. The numerical stability of linear multistep methods for delay differential equations with many delays. *SIAM Journal on Numerical Analysis*, 33(3):883–889, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tin:1994:IMS

[TKJ94] S.-K. Tin, N. Kopell, and C. K. R. T. Jones. Invariant manifolds and singularly perturbed boundary value problems. *SIAM Journal on Numerical Analysis*, 31(6):1558–1576, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tallec:1998:NND

[TMV98] Patrick Le Tallec, Jan Mandel, and Marina Vidrascu. A Neumann–Neumann domain decomposition algorithm for solving plate and shell problems. *SIAM Journal on Numerical Analysis*, 35(2):836–867, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29101`.

Toint:1979:SCA

[Toi79] Ph. Toint. On the superlinear convergence of an algorithm for solving a sparse minimization problem. *SIAM Journal on Numerical Analysis*, 16(6):1036–1045, December 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Traub:1965:PDQ

[Tra65] J. F. Traub. The principle of differentiated quotients. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(3):437–439, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Trangenstein:1977:FEM

[Tra77] John A. Trangenstein. A finite element method for the Tricomi problem in the elliptic region. *SIAM Journal on Numerical Analysis*, 14(6): 1066–1077, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tran:1996:LEE

[Tra96] Thanh Tran. Local error estimates for the Galerkin method applied to strongly elliptic integral equations on open curves. *SIAM Journal on Numerical Analysis*, 33 (4):1484–1493, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/25140.

Trench:1972:SCD

[Tre72] William F. Trench. Stability of a class of discrete minimum variance smoothing formulas. *SIAM Journal on Numerical Analysis*, 9(2):307–315, June 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Trefethen:1983:CEC

[Tre83] Lloyd N. Trefethen. Circularity of the error curve and sharpness of the CF method in complex Chebyshev approximation. *SIAM Journal on Numerical Analysis*, 20(6): 1258–1263, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Trummer:1984:MSI

[Tru84] Manfred R. Trummer. A method for solving ill-posed linear operator equations. *SIAM Journal on Numerical Analysis*, 21(4):729–737, August 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Trummer:1986:EIC

[Tru86] Manfred R. Trummer. An efficient implementation of a conformal mapping method based on the Szegő kernel. *SIAM Journal on Numerical Analysis*, 23(4):853–872, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tam:1993:SPE

[TS93] Hon-Wah Tam and Robert D. Skeel. Stability of parallel explicit ODE methods. *SIAM Journal on Numerical Analysis*, 30(4):1179–1192, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tsao:1975:NIH

[Tsa75] Nai-Kuan Tsao. A note on implementing the Householder transformation. *SIAM Journal on Numerical Analysis*, 12(1):53–58, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tseng:1996:MEA

[Tse96] Ching-Yih Tseng. A multiple-exchange algorithm for complex Chebyshev approximation by polynomials on the unit circle. *SIAM Journal on Numerical Analysis*, 33 (5):2017–2049, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170

(electronic). URL http://epubs.siam.org/sam-bin/dbq/article/25497.

Trefethen:1987:IPS

[TT87] Lloyd N. Trefethen and Manfred R. Trummer. An instability phenomenon in spectral methods. *SIAM Journal on Numerical Analysis*, 24 (5):1008–1023, October 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tang:1995:EBF

[TT95] Tao Tang and Zhen Huan Teng. Error bounds for fractional step methods for conservation laws with source terms. *SIAM Journal on Numerical Analysis*, 32(1):110–127, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tadmor:1999:PEE

[TT99] Eitan Tadmor and Tao Tang. Pointwise error estimates for scalar conservation laws with piecewise smooth solutions. *SIAM Journal on Numerical Analysis*, 36(6): 1739–1758, December 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/33399.

Tucker:1969:SNC

[Tuc69] T. S. Tucker. Stability of nonlinear computing schemes. *SIAM Journal on Numerical Analysis*, 6(1):72–81, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Turkel:1977:CMH

[Tur77] Eli Turkel. Composite methods for hyperbolic equations. *SIAM Journal on Numerical Analysis*, 14(4):744–759, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tobiska:1996:ASD

[TV96] Lutz Tobiska and Rüdiger Verfürth. Analysis of a streamline diffusion finite element method for the Stokes and Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 33(1):107–127, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Taylor:1970:CBR

[TW70] G. D. Taylor and M. J. Winter. Calculation of best restricted approximations. *SIAM Journal on Numerical Analysis*, 7(2):248–255, June 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Thomee:1974:CEG

[TW74] Vidar Thomee and Burton Wendroff. Convergence estimates for Galerkin methods for variable coefficient initial value problems. *SIAM Journal on Numerical Analysis*, 11(5):1059–1068, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Thomee:1975:GMS

[TW75] Vidar Thomee and Lars Wahlbin. On Galerkin methods in semilinear parabolic problems. *SIAM Journal on Numerical Analysis*, 12(3):378–389, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tapia:1988:PNM

[TW88] R. A. Tapia and David L. Whitley. The projected Newton method has order $1 + \sqrt{2}$ for the symmetric eigenvalue problem. *SIAM Journal on Numerical Analysis*, 25(6):1376–1382, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Tveito:1993:EEF

[TW93] Aslak Tveito and Ragnar Winther. An error estimate for a finite difference scheme approximating a hyperbolic system of conservation laws. *SIAM Journal on Numerical Analysis*, 30(2):401–424, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Thomee:1989:SGP

[TXZ89] Vidar Thomée, Jin Chao Xu, and Nai Ying Zhang. Superconvergence of the gradient in piecewise linear finite-element approximation to a parabolic problem. *SIAM Journal on Numerical Analysis*, 26(3):553–573, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Teng:1995:CVE

[TYZ95] Zhen Huan Teng, Lung An Ying, and Ping Wen Zhang. Convergence of the variable-elliptic-vortex method for Euler equations. *SIAM Journal on Numerical Analysis*, 32(3):754–774, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Urabe:1968:RED

[Ura68] Minoru Urabe. Roundoff error distribution in fixed-point multiplication and a remark about the rounding rule. *SIAM Journal on Numerical Analysis*, 5(2):202–210, June 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Urbach:1991:CGM

[Urb91] H. P. Urbach. Convergence of the Galerkin method for two-dimensional electromagnetic problems. *SIAM Journal on Numerical Analysis*, 28 (3):697–710, June 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Usow:1967:ACC

[Uso67a] Karl H. Usow. On L_1 approximation I: Computation for continuous functions and continuous dependence. *SIAM Journal on Numerical Analysis*, 4(1):70–88, March 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Usow:1967:AIC

[Uso67b] Karl H. Usow. On L_1 approximation II: Computation for discrete functions and discretization effects. *SIAM Journal on Numerical Analysis*, 4(2):233–244, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Utumi:1996:OTS

[UTK96] Masaki Utumi, Ryuji Takaki, and Toshio Kawai. Optimal time step control for the numerical solution of ordinary differential equations. *SIAM Journal on Numerical Analysis*, 33(4): 1644–1653, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26358`.

Victory:1991:CTP

[VA91] H. D. Victory, Jr. and Edward J. Allen. The convergence theory of particle-in-cell methods for multidimensional Vlasov–Poisson systems. *SIAM Journal on Numerical Analysis*, 28(5):1207–1241, October 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vigo-Aguiar:1998:GPA

[VAF98] Jesus Vigo-Aguiar and José M. Ferrándiz. A general procedure for the adaptation of multistep algorithms to the integration of oscillatory problems. *SIAM Journal on Numerical Analysis*, 35 (4):1684–1708, August 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28676`.

Vandergraft:1967:NMC

[Van67] James S. Vandergraft. Newton's method for convex operators in partially ordered spaces. *SIAM Journal on Numerical Analysis*, 4(3):406–432, September 1967. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Vandergraft:1972:APO

[Van72] James S. Vandergraft. Applications of partial orderings to the study of positive definiteness, monotonicity, and convergence of iterative methods for linear systems. *SIAM Journal on Numerical Analysis*, 9(1):97–104, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

VanLoan:1975:GME

[Van75] Charles F. Van Loan. A general matrix eigenvalue algorithm. *SIAM Journal on Numerical Analysis*, 12(6):819–834, December 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Loan:1976:GSV

[Van76] Charles F. Van Loan. Generalizing the singular value decomposition. *SIAM Journal on Numerical Analysis*, 13 (1):76–83, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Loan:1977:SME

[Van77] Charles Van Loan. The sensitivity of the matrix exponential. *SIAM Journal on Numerical Analysis*, 14(6):971–981, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

vanderHouwen:1979:SRK

[van79] P. J. van der Houwen. Stabilized Runge–Kutta methods for second order differential equations without first derivatives. *SIAM Journal on Numerical Analysis*, 16(3): 523–537, June 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

vanderHouwen:1980:MSM

[van80] P. J. van der Houwen. Multistep splitting methods of high order for initial value problems. *SIAM Journal on Numerical Analysis*, 17(3): 410–427, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

VanderCruyssen:1981:SEG

[Van81a] P. Van Der Cruyssen. Stable evaluation of generalized continued fractions. *SIAM Journal on Numerical Analysis*, 18(5):871–881, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

vanderHouwen:1981:MNM

[van81b] P. J. van der Houwen. Modified Nyström methods for semidiscrete hyperbolic differential equations. *SIAM Journal on Numerical Analysis*, 18(6):1081–1097, Decem-

ber 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

vanVeldhuizen:1981:S

[van81c] M. van Veldhuizen. *D*-stability. *SIAM Journal on Numerical Analysis*, 18(1): 45–64, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). In SIGNUM Meeting on Numerical Ordinary Differential Equations.

vanderHouwen:1984:ISM

[van84] P. J. van der Houwen. Iterated splitting methods of high order for time-dependent partial differential equations. *SIAM Journal on Numerical Analysis*, 21(4):635–656, August 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

VanLoan:1985:MWE

[Van85] Charles Van Loan. On the method of weighting for equality-constrained least-squares problems. *SIAM Journal on Numerical Analysis*, 22(5):851–864, October 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

vanPutten:1995:TDN

[van95] Maurice H. P. M. van Putten. A two-dimensional numerical implementation of magneto-hydrodynamics in divergence form. *SIAM Journal on Numerical Analysis*, 32(5):1504–1518, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varga:1966:DMP

[Var66] Richard S. Varga. On a discrete maximum principle. *SIAM Journal on Numerical Analysis*, 3(2):355–359, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varga:1967:ASA

[Var67] Richard S. Varga. Abstract: Some applications of numerical analysis to physical problems. *SIAM Journal on Numerical Analysis*, 4 (1):129, March 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varga:1970:MGS

[Var70] Richard S. Varga. Minimal Gerschgorin sets for partitioned matrices. *SIAM Journal on Numerical Analysis*, 7 (4):493–507, December 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varah:1971:SDA

[Var71a] J. M. Varah. Stability of difference approximations to the mixed initial boundary value problems for parabolic systems. *SIAM Journal on Numerical Analysis, 8(3):598–615, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varah:1971:SHO

[Var71b] J. M. Varah. Stability of high order accurate difference methods for parabolic equations with boundary conditions. *SIAM Journal on Numerical Analysis*, 8(3):569–574, September 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varah:1973:NSI

[Var73] J. M. Varah. On the numerical solution of ill-conditioned linear systems with applications to ill-posed problems. *SIAM Journal on Numerical Analysis*, 10(2): 257–267, April 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varah:1976:ARC

[Var76] J. M. Varah. Alternate row and column elimination for solving certain linear systems. *SIAM Journal on Numerical Analysis*, 13(1):71–75, March 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varah:1977:SBC

[Var77] J. M. Varah. On the stability of boundary conditions for separable difference approximations to parabolic equations. *SIAM Journal on Numerical Analysis*, 14(6):1114–1125, December 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varah:1978:SSL

[Var78] J. M. Varah. Stiffly stable linear multistep methods of extended order. *SIAM Journal on Numerical Analysis*, 15(6):1234–1246, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varah:1979:STM

[Var79] J. M. Varah. On the separation of two matrices. *SIAM Journal on Numerical Analysis*, 16(2):216–222, April 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varah:1980:SRS

[Var80] J. M. Varah. Stability restrictions on second order, three level finite difference schemes for parabolic equations. *SIAM Journal on Numerical Analysis*, 17(2): 300–309, April 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Varma:1981:IRT

[Var81] A. K. Varma. An interpolatory rational trigonometric approximation. *SIAM Journal on Numerical Analysis*, 18(5):897–899, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vardi:1985:TRA

[Var85] Avi Vardi. A trust region algorithm for equality constrained minimization: convergence properties and implementation. *SIAM Journal on Numerical Analysis*, 22 (3):575–591, June 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vasseur:1999:KSS

[Vas99] Alexis Vasseur. Kinetic semidiscretization of scalar conservation laws and convergence by using averaging lemmas. *SIAM Journal on Numerical Analysis*, 36(2):465–474, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31361`.

Vatsya:1988:CCR

[Vat88] S. R. Vatsya. Convergence of conjugate residual-like methods to solve linear equations. *SIAM Journal on Numerical Analysis*, 25(4):957–964, August 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vavasis:1996:SFE

[Vav96] Stephen A. Vavasis. Stable finite elements for problems with wild coefficients. *SIAM Journal on Numerical Analysis*, 33(3):890–916, June 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Veliov:1992:SOD

[Vel92] Vladimir Veliov. Second-order discrete approximation to linear differential inclusions. *SIAM Journal on Numerical Analysis*, 29(2): 439–451, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verner:1970:QID

[Ver70] J. H. Verner. Quadratures for implicit differential equations. *SIAM Journal on Numerical Analysis*, 7(3):373–385, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verner:1978:ERK

[Ver78] J. H. Verner. Explicit Runge–Kutta methods with estimates of the local truncation error. *SIAM Journal on Numerical Analysis*, 15(4): 772–790, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verner:1979:FIR

[Ver79] J. H. Verner. Families of imbedded Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 16(5): 857–875, October 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verwer:1982:ARM

[Ver82] J. G. Verwer. An analysis of Rosenbrock methods for nonlinear stiff initial value problems. *SIAM Journal on Numerical Analysis*, 19(1):155–170, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verfurth:1984:MAM

[Ver84] R. Verfürth. A multilevel algorithm for mixed problems. *SIAM Journal on Numerical Analysis*, 21(2): 264–271, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verfurth:1988:MAM

[Ver88] R. Verfürth. Multilevel algorithms for mixed problems. II. treatment of the mini-element. *SIAM Journal on Numerical Analysis*, 25(2): 285–293, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verner:1990:CSR

[Ver90a] J. H. Verner. A contrast of some Runge–Kutta formula pairs. *SIAM Journal on Numerical Analysis*, 27(5):1332–1344, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vertesi:1990:OLC

[Vér90b] P. Vértesi. Optimal Lebesgue constant for Lagrange interpolation. *SIAM Journal on Numerical Analysis*, 27 (5):1322–1331, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verner:1991:SRK

[Ver91] J. H. Verner. Some Runge–Kutta formula pairs. *SIAM Journal on Numerical Analysis*, 28(2):496–511, April 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verner:1993:DIH

[Ver93] J. H. Verner. Differentiable interpolants for high-order Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 30(5):1446–1466, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vulanovic:1993:CNA

[VF93] Relja Vulanović and Paul A. Farrell. Continuous and numerical analysis of a multiple boundary turning point problem. *SIAM Journal on Numerical Analysis*, 30(5):1400–1418, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Victory:1986:FDM

[VG86] H. D. Victory, Jr. and Keshab Ganguly. On finite-difference methods for solving discrete-ordinates transport equations. *SIAM Journal on Numerical Analysis*, 23(1):78–108, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verschelde:1993:ACS

[VH93] Jan Verschelde and Ann Haegemans. The *GBQ*-algorithm for constructing start systems of homotopies for polynomial systems. *SIAM Journal on Numerical Analysis*, 30(2): 583–594, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vozovoi:1996:AAF

[VIA96] L. Vozovoi, M. Israeli, and A. Averbuch. Analysis and application of Fourier–Gegenbauer method to stiff differential equations. *SIAM Journal on Numerical Analysis*, 33(5):1844–1863, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26359`.

Victory:1980:CPD

[Vic80] H. D. Victory, Jr. Convergence properties of discrete-ordinates solutions for neutron transport in three-dimensional media. *SIAM Journal on Numerical Analysis*, 17(1):71–83, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vila:1986:SGS

[Vil86] J. P. Vila. Simplified Godunov schemes for 2×2 systems of conservation laws. *SIAM Journal on Numerical Analysis*, 23(6):1173–1192, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vila:1989:ACS

[Vil89] J. P. Vila. An analysis of a class of second-order accurate Godunov-type schemes. *SIAM Journal on Numerical Analysis*, 26(4): 830–853, August 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vincenti:1986:CCO

[Vin86] Graziano Vincenti. On the computation of the coefficients of s-orthogonal polynomials. *SIAM Journal on Numerical Analysis*, 23(6):1290–1294, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vanaja:1990:IMF

[VK90] V. Vanaja and R. B. Kellogg. Iterative methods for a forward-backward heat equation. *SIAM Journal on Numerical Analysis*, 27(3): 622–635, June 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

vonGolitschek:1992:ASP

[vL92] M. von Golitschek and W. A. Light. Approximation by solutions of the planar wave equation. *SIAM Journal on Numerical Analysis*, 29(3): 816–830, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

VanHentenryck:1997:SPS

[VMK97] Pascal Van Hentenryck, David McAllester, and Deepak Kapur. Solving polynomial systems using a branch and prune approach. *SIAM Journal on Numerical Analysis*, 34(2):797–827, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28150`.

Vanmaele:1997:ACV

[VMSB97] M. Vanmaele, K. W. Morton, E. Suli, and A. Borzi. Analysis of the cell vertex finite volume method for the Cauchy–Riemann equations. *SIAM Journal on Numerical Analysis*, 34(5): 2043–2062, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27638`.

Vogel:1986:OCT

[Vog86] C. R. Vogel. Optimal choice of a truncation level for the truncated SVD solution of linear first kind integral equations when data are noisy. *SIAM Journal on Numerical Analysis*, 23(1):109–117, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Voigt:1971:OCI

[Voi71a] Robert G. Voigt. Orders of convergence for iterative procedures. *SIAM Journal on Numerical Analysis*, 8(2): 222–243, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Voigt:1971:RCC

[Voi71b] Robert G. Voigt. Rates of convergence for a class of iterative procedures. *SIAM Journal on Numerical Analysis*, 8(1):127–134, March 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Voss:1988:FOE

[Vos88] David Voss. A fifth-order exponentially fitted formula. *SIAM Journal on Numerical Analysis*, 25(3):670–678, June 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vandewalle:1993:DIM

[VP93] Stefan Vandewalle and Robert Piessens. On dynamic iteration methods for solving time-periodic differential equations. *SIAM Journal on Numerical Analysis*, 30(1):286–303, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

vanderHouwen:1987:ERK

[vS87] P. J. van der Houwen and B. P. Sommeijer. Explicit Runge–Kutta (-Nyström) methods with reduced phase errors for computing oscillating solutions. *SIAM Journal on Numerical Analysis*, 24 (3):595–617, June 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

vanderHouwen:1989:DIR

[vS89a] P. J. van der Houwen and B. P. Sommeijer. Diagonally implicit Runge–Kutta–Nyström methods for oscillatory problems. *SIAM Journal on Numerical Analysis*, 26 (2):414–429, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

vanderHouwen:1989:PLA

[vS89b] P. J. van der Houwen and B. P. Sommeijer. Phase-lag analysis of implicit Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 26 (1):214–229, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verwer:1997:SAO

[VS97] J. G. Verwer and B. P. Sommeijer. Stability analysis of an odd-even-line hopscotch method for three-dimensional advection-diffusion problems. *SIAM Journal on Numerical Analysis*, 34(1):376–388, February 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27697`.

Varga:1980:IFM

[VSM80] R. S. Varga, E. B. Saff, and V. Mehrmann. Incomplete factorizations of matrices and connections with H-matrices. *SIAM Journal on Numerical Analysis*, 17 (6):787–793, December 1980. CODEN SJNAAM. ISSN

0036-1429 (print), 1095-7170 (electronic).

vonPetersdorff:1997:MSK

[vSS97] Tobias von Petersdorff, Christoph Schwab, and Reinhold Schneider. Multiwavelets for second kind integral equations. *SIAM Journal on Numerical Analysis*, 34(6): 2212–2227, December 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27295.

Victory:1991:CAF

[VTG91] H. D. Victory, Jr., Garry Tucker, and Keshab Ganguly. The convergence analysis of fully discretized particle methods for solving Vlasov–Poisson systems. *SIAM Journal on Numerical Analysis*, 28(4):955–989, August 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Verschelde:1994:HEN

[VVC94] Jan Verschelde, Pierre Verlinden, and Ronald Cools. Homotopies exploiting Newton polytopes for solving sparse polynomial systems. *SIAM Journal on Numerical Analysis*, 31(3):915–930, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vassilevski:1995:AAM

[VW95] Panayot S. Vassilevski and Junping Wang. An application of the abstract multilevel theory to nonconforming finite element methods. *SIAM Journal on Numerical Analysis*, 32(1):235–248, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Vozovoi:1997:SAS

[VWI97] L. Vozovoi, A. Weill, and M. Israeli. Spectrally accurate solution of nonperiodic differential equations by the Fourier–Gegenbauer method. *SIAM Journal on Numerical Analysis*, 34 (4):1451–1471, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27881.

Wahlbin:1974:MNE

[Wah74] Lars Wahlbin. Maximum norm estimates for Friedrichs' scheme in two dimensions. *SIAM Journal on Numerical Analysis*, 11(4):741–752, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wahlbin:1975:MNE

[Wah75] Lars Wahlbin. On maximum norm error estimates for Galerkin approximations to one-dimensional second order parabolic boundary value problems. *SIAM Journal on Numerical Analysis*, 12(2): 177–182, April 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wahba:1977:PAS

[Wah77] Grace Wahba. Practical approximate solutions to linear operator equations when the data are noisy. *SIAM Journal on Numerical Analysis*, 14 (4):651–667, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wahlbin:1980:RPS

[Wah80] Lars B. Wahlbin. A remark on parabolic smoothing and the finite element method. *SIAM Journal on Numerical Analysis*, 17(1):33–38, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wahlbin:1992:SBF

[Wah92] Lars B. Wahlbin. On superconvergence up to boundaries in finite element methods: A counterexample. *SIAM Journal on Numerical Analysis*, 29(4):937–946, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Walsh:1967:CSR

[Wal67] J. L. Walsh. On the convergence of sequences of rational functions. *SIAM Journal on Numerical Analysis*, 4 (2):211–221, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Walsh:1973:OCP

[Wal73] Robert T. Walsh. Optimization and comparison of partial difference methods. *SIAM Journal on Numerical Analysis*, 10(4):785–797, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Waldvogel:1983:PVL

[Wal83] Jörg Waldvogel. The period in the Volterra–Lotka predator-prey model. *SIAM Journal on Numerical Analysis*, 20(6):1264–1272, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). Dedicated to Peter Henrici on the occasion of his 60th birthday.

Walkington:1988:AWP

[Wal88] Noel J. Walkington. Acoustic wave propagation through flows with vorticity. *SIAM Journal on Numerical Analysis*, 25(3):533–549, June 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Walkington:1996:ACM

[Wal96] Noel J. Walkington. Algorithms for computing motion by mean curvature. *SIAM Journal on Numerical Analysis*, 33(6):2215–2238, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26206`.

Waldron:1998:ELI

[Wal98] Shayne Waldron. The error in linear interpolation at the vertices of a simplex. *SIAM Journal on Numerical Analysis*, 35(3):1191–1200, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31315`.

Walden:1999:FBM

[Wal99] Johan Waldén. Filter bank methods for hyperbolic PDEs. *SIAM Journal on Numerical Analysis*, 36(4):1183–1233, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31313`.

Wang:1992:CAR

[Wan92] Jun Ping Wang. Convergence analysis without regularity assumptions for multigrid algorithms based on SOR smoothing. *SIAM Journal on Numerical Analysis*, 29(4):987–1001, August 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wang:1993:CAM

[Wan93a] Jun Ping Wang. Convergence analysis of multigrid algorithms for nonselfadjoint and indefinite elliptic problems. *SIAM Journal on Numerical Analysis*, 30(1):275–285, February 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wang:1993:CAS

[Wan93b] Jun Ping Wang. Convergence analysis of the Schwarz algorithm and multilevel decomposition iterative methods. II. nonselfadjoint and indefinite elliptic problems. *SIAM Journal on Numerical Analysis*, 30(4):953–970, September 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ward:1975:CSA

[War75] Robert C. Ward. The combination shift QZ algorithm. *SIAM Journal on Numerical Analysis*, 12(6):835–853, December 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ward:1977:NCM

[War77] Robert C. Ward. Numerical computation of the matrix exponential with accuracy estimate. *SIAM Journal on Numerical Analysis*, 14(4):600–610, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wassyng:1982:SMR

[Was82] A. Wassyng. Solving $Ax = b$: A method with reduced storage requirements. *SIAM Journal on Numerical Analysis*, 19(1):197–204, February 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Watson:1974:CBR

[Wat74] G. A. Watson. The calculation of best restricted approximations. *SIAM Journal on Numerical Analysis*, 11 (4):693–699, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Watson:1975:MEA

[Wat75] G. A. Watson. A multiple exchange algorithm for multivariate Chebyshev approximation. *SIAM Journal on Numerical Analysis*, 12(1): 46–52, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Watkins:1977:EBP

[Wat77] David S. Watkins. Error bounds for polynomial blending function methods. *SIAM Journal on Numerical Analysis*, 14(4):721–734, September 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Watson:1979:AGC

[Wat79] Layne T. Watson. An algorithm that is globally convergent with probability one for a class of nonlinear two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 16(3): 394–401, June 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Watkins:1981:DIV

[Wat81a] David S. Watkins. Determining initial values for stiff systems of ordinary differential equations. *SIAM Journal on Numerical Analysis*, 18(1): 13–20, February 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). In SIGNUM Meeting on Numerical Ordinary Differential Equations.

Watkins:1981:EIS

[Wat81b] David S. Watkins. Efficient initialization of stiff systems with one unknown initial condition. *SIAM Journal on Numerical Analysis*, 18(5):794–

800, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wathen:1986:MIS

[Wat86] A. J. Wathen. Mesh-independent spectra in the moving finite element equations. *SIAM Journal on Numerical Analysis*, 23(4): 797–814, August 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wissmann:1986:PSC

[WB86] Johannes W. Wissmann and Thomas Becker. Partially symmetric cubature formulas for even degrees of exactness. *SIAM Journal on Numerical Analysis*, 23(3):676–685, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wiegmann:1998:IIM

[WB98] Andreas Wiegmann and Kenneth P. Bube. The immersed interface method for nonlinear differential equations with discontinuous coefficients and singular sources. *SIAM Journal on Numerical Analysis*, 35 (1):177–200, February 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29378`.

Weber:1985:MBI

[Web85] H. Weber. Multigrid bifurcation iteration. *SIAM Journal on Numerical Analysis*, 22 (2):262–279, April 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Chu:1994:MRD

[wECGS94] K. w. E. Chu, W. Govaerts, and A. Spence. Matrices with rank deficiency two in eigenvalue problems and dynamical systems. *SIAM Journal on Numerical Analysis*, 31(2): 524–539, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weekes:1998:TWS

[Wee98] Suzanne L. Weekes. The travelling wave scheme for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 35(3):1249–1270, June 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29851`.

Wegge:1966:DVN

[Weg66] Leon Wegge. On a discrete version of the Newton–Raphson method. *SIAM Journal on Numerical Analysis*, 3(1):134–142, March 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wegmann:1986:FNM

[Weg86] Rudolf Wegmann. On Fornberg's numerical method for conformal mapping. *SIAM Journal on Numerical Analysis*, 23(6):1199–1213, December 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weinstein:1969:SNE

[Wei69] Stanley E. Weinstein. Solution of nonlinear equations by iterative procedures which use approximation techniques. *SIAM Journal on Numerical Analysis*, 6(2):272–283, June 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weinstein:1971:PAF

[Wei71] Stanley E. Weinstein. Product approximations of functions of several variables. *SIAM Journal on Numerical Analysis*, 8(2):178–189, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weinberger:1972:ONS

[Wei72a] H. F. Weinberger. On optimal numerical solution of partial differential equations. *SIAM Journal on Numerical Analysis*, 9(1):182–198, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weinstein:1972:UAF

[Wei72b] S. E. Weinstein. Uniform approximation of functions through optimal partitioning. *SIAM Journal on Numerical Analysis*, 9(3):509–517, September 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weinstein:1974:NSN

[Wei74a] Stanley E. Weinstein. On numerical solution of nonlinear equations through nonlinear interpolation or approximation. *SIAM Journal on Numerical Analysis*, 11(3):461–471, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weiss:1974:AFP

[Wei74b] Richard Weiss. On the approximation of fixed points of nonlinear compact operators. *SIAM Journal on Numerical Analysis*, 11(3):550–553, June 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weinmuller:1986:CSB

[Wei86] Ewa Weinmüller. Collocation for singular boundary value problems of second order. *SIAM Journal on Numerical Analysis*, 23(5):1062–1095, October 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weinmuller:1989:SSB

[Wei89] Ewa B. Weinmüller. Stability of singular boundary value problems and their discretization by finite differences. *SIAM Journal on Numerical Analysis*, 26(1):180–213, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wei:1992:EUN

[Wei92a] Dongming Wei. Existence, uniqueness, and numerical analysis of solutions of a quasilinear parabolic problem. *SIAM Journal on Numerical Analysis*, 29(2):484–497, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wei:1992:PTR

[Wei92b] Mu Sheng Wei. Perturbation theory for the rank-deficient equality constrained least squares problem. *SIAM Journal on Numerical Analysis*, 29(5):1462–1481, October 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weinan:1993:CFM

[Wei93] E. Weinan. Convergence of Fourier methods for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 30(3):650–674, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weideman:1994:CCE

[Wei94] J. A. C. Weideman. Computation of the complex error function. *SIAM Journal on Numerical Analysis*, 31(5):1497–1518, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weideman:1995:ECE

[Wei95] J. A. C. Weideman. Erratum: “Computation of the complex error function” [SIAM J. Numer. Anal. **7** (1970), no. 1, 187–198]. *SIAM Journal on Numerical Analysis*, 32(1):330–331, February 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [Gau70].

Welfert:1997:GPD

[Wel97] Bruno D. Welfert. Generation of pseudospectral differentiation matrices I. *SIAM Journal on Numerical Analysis*, 34(4):1640–1657, August 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29554`.

Wendroff:1968:WPP

[Wen68] Burton Wendroff. Well-posed problems and stable difference operators. *SIAM Journal on Numerical Analysis*, 5

(1):71–82, March 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Werner:1975:III

[Wer75] Helmut Werner. Interpolation and integration of initial value problems of ordinary differential equations by regular splines. *SIAM Journal on Numerical Analysis*, 12 (2):255–271, April 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Werner:1996:CHB

[Wer96] Bodo Werner. Computation of Hopf bifurcation with bordered matrices. *SIAM Journal on Numerical Analysis*, 33 (2):435–455, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weiser:1980:SEE

[WES80] A. Weiser, S. C. Eisenstat, and M. H. Schultz. On solving elliptic equations to moderate accuracy. *SIAM Journal on Numerical Analysis*, 17 (6):908–929, December 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wetton:1997:ASE

[Wet97a] Brian R. Wetton. Analysis of the spatial error for a class of finite difference methods for viscous incompressible flow. *SIAM Journal on Numerical Analysis*, 34(2):723–755, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27474`.

Wetton:1997:EAC

[Wet97b] Brian R. Wetton. Error analysis for Chorin's original fully discrete projection method and regularizations in space and time. *SIAM Journal on Numerical Analysis*, 34 (5):1683–1697, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28998`.

Winker:1997:ATA

[WF97] Peter Winker and Kai-Tai Fang. Application of threshold-accepting to the evaluation of the discrepancy of a set of points. *SIAM Journal on Numerical Analysis*, 34 (5):2028–2042, October 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28607`.

Wilson:1990:LTN

[WGS90] F. Wesley Wilson, R. Kent Goodrich, and Wendy Spratte. Lawson's triangulation is nearly optimal for controlling error bounds. *SIAM Journal on Numerical Analysis*, 27(1): 190–197, February 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weideman:1986:SSM

[WH86] J. A. C. Weideman and B. M. Herbst. Split-step methods for the solution of the nonlinear Schrödinger equation. *SIAM Journal on Numerical Analysis*, 23(3):485–507, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wu:1997:FEM

[WH97] Xiaonan Wu and Houde Han. A finite-element method for Laplace- and Helmholtz-type boundary value problems with singularities. *SIAM Journal on Numerical Analysis*, 34 (3):1037–1050, June 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25848`.

Wheeler:1973:EOO

[Whe73a] Mary Fanett Wheeler. L_∞ estimates of optimal orders for Galerkin methods for one-dimensional second order parabolic and hyperbolic equations. *SIAM Journal on Numerical Analysis*, 10(5): 908–913, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wheeler:1973:PEE

[Whe73b] Mary Fanett Wheeler. *A Priori* L_2 error estimates for Galerkin approximations to parabolic partial differential equations. *SIAM Journal on Numerical Analysis*, 10 (4):723–759, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wheeler:1973:OEE

[Whe73c] Mary Fanett Wheeler. An optimal L_∞ error estimate for Galerkin approximations to solutions of two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 10(5):914–917, October 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wheeler:1974:GPE

[Whe74] Mary Fanett Wheeler. A Galerkin procedure for estimating the flux for two-point boundary value problems. *SIAM Journal on Numerical Analysis*, 11(4):764–768, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wheeler:1975:GMP

[Whe75] Mary F. Wheeler. An H^{-1} Galerkin method for parabolic problems in a single space variable. *SIAM Journal on Numerical Analysis*, 12(5): 803–817, October 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wheeler:1977:CFE

[Whe77] Mary Fanett Wheeler. A C^0-collocation-finite element method for two-point boundary value problems and one space dimensional parabolic problems. *SIAM Journal on Numerical Analysis*, 14(1): 71–90, March 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wheeler:1978:ECF

[Whe78] Mary Fanett Wheeler. An elliptic collocation-finite element method with interior penalties. *SIAM Journal on Numerical Analysis*, 15(1): 152–161, February 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

White:1979:SEM

[Whi79] Andrew B. White, Jr. On selection of equidistributing meshes for two-point boundary-value problems. *SIAM Journal on Numerical Analysis*, 16(3):472–502, June 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

White:1982:EFS

[Whi82a] R. E. White. An enthalpy formulation of the Stefan problem. *SIAM Journal on Numerical Analysis*, 19(6):1129–1157, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

White:1982:NSE

[Whi82b] R. E. White. A numerical solution of the enthalpy formulation of the Stefan problem. *SIAM Journal on Numerical Analysis*, 19(6):1158–1172, December 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

White:1982:NSI

[Whi82c] Andrew B. White, Jr. On the numerical solution of initial/boundary-value problems in one space dimension. *SIAM Journal on Numerical Analysis*, 19(4):683–697, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

White:1985:BAP

[Whi85] R. E. White. The binary alloy problem: existence, uniqueness, and numerical approximation. *SIAM Journal on Numerical Analysis*, 22(2): 205–244, April 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

White:1986:NPA

[Whi86a] R. E. White. A nonlinear parallel algorithm with application to the Stefan problem. *SIAM Journal on Numerical Analysis*, 23(3):639–652, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Whitley:1986:SFR

[Whi86b] Robert Whitley. The stability of finite rank methods with applications to integral equations. *SIAM Journal on Numerical Analysis*, 23(1):118–134, February 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Widder:1966:JLW

[Wid66] D. V. Widder. Joseph Leonard Walsh. *SIAM Journal on Numerical Analysis*, 3 (2):171–172, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Widlund:1978:LMC

[Wid78] Olof Widlund. A Lanczos method for a class of nonsymmetric systems of linear equations. *SIAM Journal on Numerical Analysis*, 15(4): 801–812, August 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wigley:1966:CDA

[Wig66] Neil M. Wigley. On the convergence of discrete approximations to solutions of mixed boundary value problems. *SIAM Journal on Numerical Analysis*, 3(3):372–382, September 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wigley:1987:SIF

[Wig87] Neil M. Wigley. Stress intensity factors and improved convergence estimates at a corner. *SIAM Journal on Numerical Analysis*, 24(2): 350–354, April 1987. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wilson:1969:FCG

[Wil69] G. Wilson. Factorization of the covariance generating function of a pure moving average process. *SIAM Journal on Numerical Analysis*, 6 (1):1–7, March 1969. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wilson:1970:NSC

[Wil70] M. Wayne Wilson. Necessary and sufficient conditions for equidistant quadrature formula. *SIAM Journal on Numerical Analysis*, 7(1): 134–141, March 1970. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Williams:1972:NCA

[Wil72] Jack Williams. Numerical Chebyshev approximation in the complex plane. *SIAM Journal on Numerical Analysis*, 9(4):638–649, December 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Willson:1973:NPM

[Wil73] A. N. Willson, Jr. A note on pairs of matrices and matrices of monotone kind. *SIAM Journal on Numerical Analysis*, 10(4):618–622, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wilhelmsen:1974:NCC

[Wil74] Don R. Wilhelmsen. Nonnegative cubature on convex sets. *SIAM Journal on Numerical Analysis*, 11(2): 332–346, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wilhelmsen:1978:OQP

[Wil78] D. R. Wilhelmsen. Optimal quadrature for periodic analytic functions. *SIAM Journal on Numerical Analysis*, 15 (2):291–296, April 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Williams:1979:CCR

[Wil79] Jack Williams. Characterization and computation of rational Chebyshev approximations in the complex plane. *SIAM Journal on Numerical Analysis*, 16(5):819–827, October 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wildenauer:1981:CDA

[Wil81] Peter Wildenauer. Construction of domains with all solutions, and the existence of extreme solutions. *SIAM Journal on Numerical Analysis*, 18(5):801–807, October 1981. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wimp:1970:DFI

[Wim70] Jet Wimp. Derivative-free iteration processes. *SIAM Journal on Numerical Analysis*, 7(3):329–334, September 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wimp:1977:NMA

[Wim77] Jet Wimp. New methods for accelerating the convergence of sequences arising in Laplace transform theory. *SIAM Journal on Numerical Analysis*, 14(2): 194–204, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Winther:1980:SSC

[Win80] Ragnar Winther. Some superlinear convergence results for the conjugate gradient method. *SIAM Journal on Numerical Analysis*, 17(1): 14–17, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Winther:1982:FEM

[Win82] Ragnar Winther. A finite element method for a version of the Boussinesq equation. *SIAM Journal on Numerical Analysis*, 19(3):561–570, June 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wixom:1978:INC

[Wix78] James A. Wixom. Interpolation to networks of curves in E^3. *SIAM Journal on Numerical Analysis*, 15(6):1178–1193, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weinan:1995:PMI

[WL95] E. Weinan and Jian-Guo Liu. Projection method. I. convergence and numerical boundary layers. *SIAM Journal on Numerical Analysis*, 32(4): 1017–1057, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Whitney:1967:TAR

[WM67] T. M. Whitney and R. K. Meany. Two algorithms related to the method of steepest descent. *SIAM Journal on Numerical Analysis*, 4(1): 109–118, March 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wollman:1996:NAO

[WO96] Stephen Wollman and Ercument Ozizmir. Numerical approximation of the one-dimensional Vlasov–Poisson system with periodic boundary conditions. *SIAM Journal on Numerical Analysis*, 33 (4):1377–1409, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23358`.

Wohlmuth:1999:HPE

[Woh99] Barbara I. Wohlmuth. Hierarchical A posteriori error estimators for mortar finite element methods with Lagrange multipliers. *SIAM Journal on Numerical Analysis*, 36 (5):1636–1658, October 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33051`.

Wolfe:1980:MKA

[Wol80] M. A. Wolfe. A modification of Krawczyk's algorithm.

SIAM Journal on Numerical Analysis, 17(3):376–379, June 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wolkenfelt:1983:RBR

[Wol83] P. H. M. Wolkenfelt. On the relation between the repetition factor and numerical stability of direct quadrature methods for second kind Volterra integral equations. *SIAM Journal on Numerical Analysis*, 20(5):1049–1061, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Womble:1989:FTM

[Wom89] David E. Womble. A front-tracking method for multiphase free boundary problems. *SIAM Journal on Numerical Analysis*, 26(2):380–396, April 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wood:1971:PEI

[Woo71] Winifred L. Wood. Periodicity effects on the iterative solution of elliptic difference equations. *SIAM Journal on Numerical Analysis*, 8(2):439–464, June 1971. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wozniakowski:1974:MSI

[Woz74a] H. Wozniakowski. Maximal stationary iterative methods for the solution of operator equations. *SIAM Journal on Numerical Analysis*, 11(5):934–949, October 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wozniakowski:1974:REA

[Woz74b] H. Wozniakowski. Rounding error analysis for the evaluation of a polynomial and some of its derivatives. *SIAM Journal on Numerical Analysis*, 11(4):780–787, September 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wozniakowski:1975:GIM

[Woz75] H. Wozniakowski. Generalized information and maximal order of iteration for operator equations. *SIAM Journal on Numerical Analysis*, 12(1):121–135, March 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Watanabe:1985:SDF

[WR85] Daniel S. Watanabe and Mitchell G. Roth. The stability of difference formulas for delay differential equations. *SIAM Journal on Numerical Analysis*, 22(1):132–145, February 1985. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

Werner:1984:CSB

[WS84] B. Werner and A. Spence. The computation of symmetry-breaking bifurcation points. *SIAM Journal on Numerical Analysis*, 21(2):388–399, April 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wathen:1993:FIS

[WS93] Andrew Wathen and David Silvester. Fast iterative solution of stabilised Stokes systems. Part I: Using simple diagonal preconditioners. *SIAM Journal on Numerical Analysis*, 30(3):630–649, June 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weideman:1988:ESO

[WT88] J. A. C. Weideman and Lloyd N. Trefethen. The eigenvalues of second-order spectral differentiation matrices. *SIAM Journal on Numerical Analysis*, 25(6):1279–1298, December 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wu:1996:DFT

[Wu96a] Lixin Wu. Dufort–Frankel-type methods for linear and nonlinear Schrödinger equations. *SIAM Journal on Numerical Analysis*, 33(4):1526–1533, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27063`.

Wu:1996:USS

[Wu96b] Zi-Niu Wu. Uniqueness of steady-state solutions for difference equations on overlapping grids. *SIAM Journal on Numerical Analysis*, 33(4):1336–1357, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25609`.

Wuytack:1970:SRP

[Wuy70] L. Wuytack. Some remarks on a paper of D. G. Moursund. *SIAM Journal on Numerical Analysis*, 7(2):233–237, June 1970. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wuytack:1974:SAR

[Wuy74] Luc Wuytack. On some aspects of the rational interpolation problem. *SIAM Journal on Numerical Analysis*, 11(1):52–60, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Westreich:1979:NBS

[WV79] David Westreich and Yaakov L. Varol. Numerical bifurcation at simple eigenvalues. *SIAM Journal on Numerical Analysis*, 16(3):538–546, June 1979. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Werner:1983:CPO

[WW83] H. Werner and L. Wuytack. On the continuity of the Padé operator. *SIAM Journal on Numerical Analysis*, 20(6): 1273–1280, December 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Weiser:1988:CBC

[WW88] Alan Weiser and Mary Fanett Wheeler. On convergence of block-centered finite differences for elliptic problems. *SIAM Journal on Numerical Analysis*, 25(2): 351–375, April 1988. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Walker:1990:LCS

[WW90] Homer F. Walker and Layne T. Watson. Least-change secant update methods for underdetermined systems. *SIAM Journal on Numerical Analysis*, 27(5):1227–1262, October 1990. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wang:1993:ECLa

[WW93a] Jing Hua Wang and Gerald Warnecke. On entropy consistency of large time step schemes. I. the Godunov and Glimm schemes. *SIAM Journal on Numerical Analysis*, 30 (5):1229–1251, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wang:1993:ECLb

[WW93b] Jing Hua Wang and Gerald Warnecke. On entropy consistency of large time step schemes. II. approximate Riemann solvers. *SIAM Journal on Numerical Analysis*, 30 (5):1252–1267, October 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wynn:1964:SRD

[Wyn64] P. Wynn. On some recent developments in the theory and application of continued fractions. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 1(??):177–197, ???? 1964. ISSN 0887-459X (print), 1095-7170 (electronic).

Wynn:1966:CSE

[Wyn66] P. Wynn. On the convergence and stability of the epsilon algorithm. *SIAM Journal on Numerical Analysis*, 3 (1):91–122, March 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Wynn:1968:UPT

[Wyn68] Peter Wynn. Upon the Padé table derived from a Stieltjes series. *SIAM Journal on Numerical Analysis*, 5(4):805–834, December 1968. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Xu:1989:CBT

[Xu89] Zong Ben Xu. A computational ball test for the existence of solutions to nonlinear operator equations. *SIAM Journal on Numerical Analysis*, 26(1):239–248, February 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Xu:1992:NCI

[Xu92] Jinchao Xu. A new class of iterative methods for nonselfadjoint or indefinite problems. *SIAM Journal on Numerical Analysis*, 29(2):303–319, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Xu:1996:TGD

[Xu96] Jinchao Xu. Two-grid discretization techniques for linear and nonlinear PDEs. *SIAM Journal on Numerical Analysis*, 33(5):1759–1777, October 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23294`.

Yang:1995:TDQ

[YA95] Yajun Yang and Kendall E. Atkinson. Two-dimensional quadrature for functions with a point singularity on a triangular region. *SIAM Journal on Numerical Analysis*, 32(3):969–983, June 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Yamamoto:1975:RRW

[Yam75] Tetsuro Yamamoto. The Rayleigh–Ritz and Weinstein–Bazley methods applied to a class of ordinary differential equations of the second order. II. *SIAM Journal on Numerical Analysis*, 12(3):428–438, June 1975. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Yamamoto:1998:NVM

[Yam98] Nobito Yamamoto. A numerical verification method for solutions of boundary value problems with local uniqueness by Banach's fixed-point theorem. *SIAM Journal on Numerical Analysis*, 35(5):2004–2013, October 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30449`.

Yan:1994:FNS

[Yan94] Yi Yan. A fast numerical solution for a second kind boundary integral equation with a logarithmic kernel. *SIAM Journal on Numerical Analysis*, 31(2):477–498, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Yan:1996:AEE

[Yan96] Yin Yan. Attractors and error estimates for discretizations of incompressible Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 33 (4):1451–1472, August 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24809`.

Yang:1999:WEI

[Yan99] Huanan Yang. On wavewise entropy inequality for high resolution schemes II: Fully discrete MUSCL schemes with exact evolution in small time. *SIAM Journal on Numerical Analysis*, 36(1): 1–31, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28149`.

Yavneh:1995:MSF

[Yav95] Irad Yavneh. Multigrid smoothing factors for red-black Gauss–Seidel relaxation applied to a class of elliptic operators. *SIAM Journal on Numerical Analysis*, 32(4): 1126–1138, August 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Yeung:1996:PEC

[YB96] Wing Kwong Yeung and Kenneth P. Bube. *A Priori* estimates and convergence for the discrete forward and inverse problems of reflection seismology. *SIAM Journal on Numerical Analysis*, 33(1): 247–279, February 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Yen:1993:CEM

[Yen93] Jeng Yen. Constrained equations of motion in multibody dynamics as ODEs on manifolds. *SIAM Journal on Numerical Analysis*, 30(2): 553–568, April 1993. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Yan:1992:OSC

[YF92] Yi Yan and Graeme Fairweather. Orthogonal spline collocation methods for some partial integrodifferential equations. *SIAM Journal on Numerical Analysis*, 29(3): 755–768, June 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ying:1995:CVM

[Yin95] Lung An Ying. Convergence of vortex methods for three-dimensional Euler equations in bounded domains. *SIAM Journal on Numerical Analysis*, 32(2):542–559, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Yakowitz:1978:WMC

[YKS78] S. Yakowitz, J. E. Krimmel, and F. Szidarovszky. Weighted Monte Carlo integration. *SIAM Journal on Numerical Analysis*, 15(6): 1289–1300, December 1978. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Young:1972:GPC

[You72a] David M. Young. Generalizations of property *A* and consistent ordering. *SIAM Journal on Numerical Analysis*, 9 (3):454–463, September 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Young:1972:CLS

[You72b] David M. Young. On the consistency of linear stationary iterative methods. *SIAM Journal on Numerical Analysis*, 9(1):89–96, March 1972. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ypma:1984:LCI

[Ypm84] T. J. Ypma. Local convergence of inexact Newton methods. *SIAM Journal on Numerical Analysis*, 21(3): 583–590, June 1984. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Yarvin:1999:IFM

[YR99] Norman Yarvin and Vladimir Rokhlin. An improved fast multipole algorithm for potential fields on the line. *SIAM Journal on Numerical Analysis*, 36(2):629–666, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32923`.

Yan:1989:MGI

[YS89] Y. Yan and I. H. Sloan. Mesh grading for integral equations of the first kind with logarithmic kernel. *SIAM Journal on Numerical Analysis*, 26 (3):574–587, June 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Yserentant:1986:MLS

[Yse86] Harry Yserentant. On the multi-level splitting of finite element spaces for indefinite elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 23(3):

581–595, June 1986. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Ying:1994:FDC

[YZ94] Lung An Ying and Ping Wen Zhang. Fully discrete convergence estimates for vortex methods in bounded domains. *SIAM Journal on Numerical Analysis*, 31(2): 344–361, April 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zanna:1999:CRC

[Zan99] A. Zanna. Collocation and relaxed collocation for the Fer and the Magnus expansions. *SIAM Journal on Numerical Analysis*, 36 (4):1145–1182, August 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32661`.

Zhang:1996:NMS

[ZB96] Zhimin Zhang and Ivo Babuška. A numerical method for steady state free boundary problems. *SIAM Journal on Numerical Analysis*, 33(6):2184–2214, December 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22985`.

Zedek:1966:ASO

[Zed66] Mishael Zedek. On approximation by solutions of ordinary linear differential equations. *SIAM Journal on Numerical Analysis*, 3(2): 360–365, June 1966. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zemla:1995:FSD

[Zem95] Adam Zemła. On the fundamental solutions for the difference Helmholtz operator. *SIAM Journal on Numerical Analysis*, 32(2): 560–570, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zennaro:1985:OSC

[Zen85] Marino Zennaro. One-step collocation: uniform superconvergence, predictor-corrector method, local error estimate. *SIAM Journal on Numerical Analysis*, 22(6): 1135–1152, December 1985. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zarnowski:1991:FDS

[ZH91] Roger Zarnowski and David Hoff. A finite-difference scheme for the Navier–Stokes equations of one-dimensional, isentropic, compressible flow. *SIAM Journal on Numerical Analysis*, 28(1):78–112, February 1991. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zhao:1994:CFD

[ZH94] Jing Zhao and David Hoff. A convergent finite-difference scheme for the Navier–Stokes equations of one-dimensional, nonisentropic, compressible flow. *SIAM Journal on Numerical Analysis*, 31(5):1289–1311, October 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zhang:1995:IEE

[Zha95] Zhen Yue Zhang. An inverse extreme eigenpair problem and its parallel iterative solution for symmetric tridiagonal matrices. *SIAM Journal on Numerical Analysis*, 32 (5):1620–1634, October 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zhang:1996:TLS

[Zha96] Xuejun Zhang. Two-level Schwarz methods for the biharmonic problem discretized conforming C^1 elements. *SIAM Journal on Numerical Analysis*, 33(2): 555–570, April 1996. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zhang:1997:ASQ

[Zha97] Zhimin Zhang. Analysis of some quadrilateral nonconforming elements for incompressible elasticity. *SIAM Journal on Numerical Analysis*, 34(2): 640–663, April 1997. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28249`.

Zhou:1983:LFE

[Zho83] S. Z. Zhou. The linear finite element method for a two-dimensional singular boundary value problem. *SIAM Journal on Numerical Analysis*, 20(5):976–984, October 1983. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zirilli:1982:SNS

[Zir82] Francesco Zirilli. The solution of nonlinear systems of equations by second order systems of O.D.E. and linearly implicit A-stable techniques. *SIAM Journal on Numerical Analysis*, 19(4):800–815, August 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zlamal:1965:AEE

[Zla65] Milos Zlamal. Asymptotic error estimates in solving elliptic equations of the fourth order by the method of finite differences. *Journal of the Society for Industrial and Applied Mathematics: Series B, Numerical Analysis*, 2(2): 337–344, ???? 1965. ISSN 0887-459X (print), 1095-7170 (electronic).

Zlamal:1967:DEE

[Zla67] Milos Zlamal. Discretization and error estimates for elliptic boundary value problems of the fourth order. *SIAM Journal on Numerical Analysis*, 4(4):626–639, December 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zlamal:1973:CEF

[Zla73] Milos Zlamal. Curved elements in the finite element method. I. *SIAM Journal on Numerical Analysis*, 10(1): 229–240, March 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zlamal:1974:CEF

[Zla74] Milos Zlamal. Curved elements in the finite element method. II. *SIAM Journal on Numerical Analysis*, 11(2): 347–362, April 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zlatev:1980:SPS

[Zla80] Zahari Zlatev. On some pivotal strategies in Gaussian elimination by sparse technique. *SIAM Journal on Numerical Analysis*, 17(1):18–30, February 1980. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zlatev:1982:UIR

[Zla82] Zahari Zlatev. Use of iterative refinement in the solution of sparse linear systems. *SIAM Journal on Numerical Analysis*, 19(2): 381–399, April 1982. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zemanian:1967:NED

[ZT67] A. H. Zemanian and R. P. Tewarson. The numerical evaluation of distributional transforms. *SIAM Journal on Numerical Analysis*, 4(2): 271–282, June 1967. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zeng:1994:MSI

[ZW94] S. Zeng and P. Wesseling. Multigrid solution of the incompressible Navier–Stokes equations in general coordinates. *SIAM Journal on Numerical Analysis*, 31(6):1764–1784, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zwart:1973:MSN

[Zwa73] Philip B. Zwart. Multivariate splines with nondegenerate partitions. *SIAM Journal on Numerical Analysis*, 10 (4):665–673, September 1973. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zhu:1994:MMM

[ZWW94] Jiang Zhu, Hong Wei Wu, and Yuan Ming Wang. A mixed method for the mixed initial boundary value problems of equations of semiconductor devices. *SIAM Journal on Numerical Analysis*, 31 (3):731–744, June 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Zeng:1998:MGC

[ZZ98] Jinping Zeng and Shuzi Zhou. On monotone and geometric convergence of Schwarz methods for two-sided obstacle problems. *SIAM Journal on Numerical Analysis*, 35(2):600–616, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28892`.