

## AUTHOR INDEX TO VOLUME 52

Author	Title	Page
AZIZ, A. K. & MONK, PETER	Continuous Finite Elements in Space and Time for the Heat Equation . . . . .	255
BABUŠKA, I. & OSBORN, J. E.	Finite Element-Galerkin Approximation of the Eigenvalues and Eigenvectors of Selfadjoint Problems . . . . .	275
BACH, ERIC & SHALLIT, JEFFREY	Factoring with Cyclotomic Polynomials . . . . .	201
BALES, LAURENCE A. & DOUGALIS, VASSILIOS A.	Cosine Methods for Nonlinear Second-Order Hyperbolic Equations . . . . .	299
BAYLISS, ALVIN, LI, YANYAN & MORAWETZ, CATHLEEN S.	Scattering by a Potential Using Hyperbolic Methods . . . . .	321
BELLEN, A., JACKIEWICZ, Z., VERMIGLIO, R. & ZENNARO, M.	Natural Continuous Extensions of Runge-Kutta Methods for Volterra Integral Equations of the Second Kind and Their Applications . . . . .	49
BRAMBLE, JAMES H., PASCIAK, JOSEPH E., SAMMON, PETER H. & THOMÉE, VIDAR	Incomplete Iterations in Multistep Backward Difference Methods for Parabolic Problems with Smooth and Non- smooth Data . . . . .	339
BRENNER, SUSANNE C.	An Optimal-Order Multigrid Method for P1 Nonconforming Finite Elements . . . . .	1
BROWNING, G. L. & KREISS, H.-O.	Comparison of Numerical Methods for the Calculation of Two-Dimensional Turbulence . . . . .	369
BUCHMANN, JOHANNES & FORD, DAVID	On the Computation of Totally Real Quartic Fields of Small Discriminant . . . . .	161
BUCHMANN, JOHANNES & PETHÖ, ATTILA	Computation of Independent Units in Number Fields by Dirichlet's Method . . . . .	149
CAI, WEI, GOTTLIEB, DAVID & SHU, CHI-WANG	Essentially Nonoscillatory Spectral Fourier Methods for Shock Wave Calculations . . . . .	389
COCKBURN, BERNARDO & SHU, CHI-WANG	TVB Runge-Kutta Local Projection Discontinuous Galerkin Finite Element Method for Conservation Laws II: General Framework . . . . .	411
COMODI, M. I.	The Hellan-Herrmann-Johnson Method: Some New Error Estimates and Postprocessing . . . . .	17
CREUTZBURG, R. & TASCHE, M.	Parameter Determination for Complex Number-Theoretic Transforms Using Cyclotomic Polynomials . . . . .	189
CROUZEIX, MICHEL & FALK, RICHARD S.	Nonconforming Finite Elements for the Stokes Problem .	437
DEL PRETE, VINCENZA	Quadratic Convergence of Vortex Methods . . . . .	457
DOUGALIS, VASSILIOS A.	<i>See: BALES, LAURENCE A. &amp; DOUGALIS, VASSILIOS A.</i>	299
DOUGHERTY, RANDALL L., EDELMAN, ALAN & HYMAN, JAMES M.	Nonnegativity-, Monotonicity-, or Convexity-Preserving Cubic and Quintic Hermite Interpolation . . . . .	471
DOUGLAS, JIM JR. & WANG, JUNPING	An Absolutely Stabilized Finite Element Method for the Stokes Problem . . . . .	495
EDELMAN, ALAN	<i>See: DOUGHERTY, RANDALL L., EDELMAN, ALAN &amp;</i> <i>HYMAN, JAMES M.</i> . . . . .	471

Author	Title	Page
EICHENAUER-HERRMANN, JÜRGEN, GROTHE, HOLGER & LEHN, JÜRGEN	On the Period Length of Pseudorandom Vector Sequences Generated by Matrix Generators . . . . .	145
ENGQUIST, BJÖRN, LÖTSTEDT, PER & SJÖGREEN, BJÖRN	Nonlinear Filters for Efficient Shock Computation . . . . .	509
FALK, RICHARD S.	<i>See: Crouzeix, Michel &amp; Falk, Richard S.</i> . . . . .	437
FORD, DAVID	<i>See: BUCHMANN, JOHANNES &amp; FORD, DAVID</i> . . . . .	161
GARABEDIAN, P. R.	Design of a Large Helical System for Magnetic Fusion Experiments . . . . .	539
GELMAN, ALEX & RHEINBOLDT, WERNER C.	On the Computation of Finite Invariant Sets of Mappings . . . . .	545
GORDON, DANIEL M.	On the Number of Elliptic Pseudoprimes . . . . .	231
GOTTLIEB, DAVID	<i>See: CAI, WEI, GOTTLIEB, DAVID &amp; SHU, CHI-WANG</i> . . . . .	389
GROTHE, HOLGER	<i>See: EICHENAUER-HERRMANN, JÜRGEN, GROTHE, HOLGER &amp; LEHN, JÜRGEN</i> . . . . .	145
HYMAN, JAMES M.	<i>See: DOUGHERTY, RANDALL L., EDELMAN, ALAN &amp; HYMAN, JAMES M.</i> . . . . .	471
ISAACSON, DAVID & ISAACSON, ELI L.	Comment on Calderón's Paper: "On an Inverse Boundary Value Problem" . . . . .	553
ISAACSON, ELI L.	<i>See: ISAACSON, DAVID &amp; ISAACSON, ELI L.</i> . . . . .	553
JACKIEWICZ, Z.	<i>See: BELLEN, A., JACKIEWICZ, Z., VERMIGLIO, R. &amp; ZENNARO, M.</i> . . . . .	49
KEELING, STEPHEN L.	Galerkin/Runge-Kutta Discretizations for Parabolic Equations with Time-Dependent Coefficients . . . . .	561
KREISS, H.-O.	<i>See: BROWNING, G. L. &amp; KREISS, H.-O.</i> . . . . .	369
LEHN, JÜRGEN	<i>See: EICHENAUER-HERRMANN, JÜRGEN, GROTHE, HOLGER &amp; LEHN, JÜRGEN</i> . . . . .	145
LI, YANYAN	<i>See: BAYLISS, ALVIN, LI, YANYAN &amp; MORAWETZ, CATHLEEN S.</i> . . . . .	321
LIE, IVAR & NØRSETT, SYVERT P.	Superconvergence for Multistep Collocation . . . . .	65
LYNESS, JAMES N.	<i>See: SLOAN, IAN H. &amp; LYNESS, JAMES N.</i> . . . . .	81
LÖTSTEDT, PER	<i>See: ENGQUIST, BJÖRN, LÖTSTEDT, PER &amp; SJÖGREEN, BJÖRN</i> . . . . .	509
MASTROIANNI, GIUSEPPE	On the Convergence of Product Formulas for the Evaluation of Certain Two-Dimensional Cauchy Principal Value Integrals . . . . .	95
MONK, PETER	<i>See: AZIZ, A. K. &amp; MONK, PETER</i> . . . . .	255
MORAIN, FRANÇOIS	On the lcm of the Differences of Eight Primes . . . . .	225
MORAWETZ, CATHLEEN S.	<i>See: BAYLISS, ALVIN, LI, YANYAN &amp; MORAWETZ, CATHLEEN S.</i> . . . . .	321
MOSTREL, MARCO MOSCHÉ	On Some Numerical Schemes for Transonic Flow Problems	587
NIEDERREITER, HARALD	The Serial Test for Congruential Pseudorandom Numbers Generated by Inversions . . . . .	135
NØRSETT, SYVERT P.	<i>See: LIE, IVAR &amp; NØRSETT, SYVERT P.</i> . . . . .	65
OSBORN, J. E.	<i>See: BABUŠKA, I. &amp; OSBORN, J. E.</i> . . . . .	275
PASCIAK, JOSEPH E.	<i>See: BRAMBLE, JAMES H., PASCIAK, JOSEPH E., SAMMON, PETER H. &amp; THOMÉE, VIDAR</i> . . . . .	339

<i>Author</i>	<i>Title</i>	<i>Page</i>
PETHÖ, ATTILA	<i>See: BUCHMANN, JOHANNES &amp; PETHÖ, ATTILA . . . . .</i>	149
POTLER, AARON	<i>See: YOUNG, JEFF &amp; POTLER, AARON . . . . .</i>	221
PUCKETT, ELBRIDGE GERRY	Convergence of a Random Particle Method to Solutions of the Kolmogorov Equation $u_t = \nu u_{xx} + u(1 - u) . . . . .$	615
RHEINBOLDT, WERNER C.	<i>See: GELMAN, ALEX &amp; RHEINBOLDT, WERNER C. . . . .</i>	545
ROBERTS, STEPHEN	Convergence of a Random Walk Method for the Burgers Equation . . . . .	647
SACCHI LANDRIANI, GIOVANNI & VANDEVEN, HERVÉ	Polynomial Approximation of Divergence-Free Functions	103
SAMMON, PETER H.	<i>See: BRAMBLE, JAMES H., PASCIAK, JOSEPH E., SAMMON, PETER H. &amp; THOMÉE, VIDAR . . . . .</i>	339
SHALLIT, JEFFREY	<i>See: BACH, ERIC &amp; SHALLIT, JEFFREY . . . . .</i>	201
SHU, CHI-WANG	<i>See: CAI, WEI, GOTTLIEB, DAVID &amp; SHU, CHI-WANG . . . . .</i>	389
SHU, CHI-WANG	<i>See: COCKBURN, BERNARDO &amp; SHU, CHI-WANG . . . . .</i>	411
SJÖGREEN, BJÖRN	<i>See: ENGQUIST, BJÖRN, LÖTSTEDT, PER &amp; SJÖGREEN, BJÖRN . . . . .</i>	509
SLOAN, IAN H. & LYNESS, JAMES N.	The Representation of Lattice Quadrature Rules as Multiple Sums . . . . .	81
SMITH, DAVID M.	Efficient Multiple-Precision Evaluation of Elementary Func- tions . . . . .	131
STEPHAN, E. P. & SURI, M.	On the Convergence of the $p$ -Version of the Boundary Ele- ment Galerkin Method . . . . .	31
STROEKER, R. J.	On Quartic Thue Equations with Trivial Solutions . . . . .	175
SURI, M.	<i>See: STEPHAN, E. P. &amp; SURI, M. . . . .</i>	31
SWARTZ, BLAIR	The Second-Order Sharpening of Blurred Smooth Borders	675
TASCHE, M.	<i>See: CREUTZBURG, R. &amp; TASCHE, M. . . . .</i>	189
THOMÉE, VIDAR	<i>See: BRAMBLE, JAMES H., PASCIAK, JOSEPH E., SAMMON, PETER H. &amp; THOMÉE, VIDAR . . . . .</i>	339
VANDEVEN, HERVÉ	<i>See: SACCHI LANDRIANI, GIOVANNI &amp; VANDEVEN, HERVÉ . . . . .</i>	103
VERMIGLIO, R.	<i>See: BELLEN, A., JACKIEWICZ, Z., VERMIGLIO, R. &amp; ZENNARO, M. . . . .</i>	49
WANG, JUNPING	<i>See: DOUGLAS, JIM JR. &amp; WANG, JUNPING . . . . .</i>	495
YOUNG, JEFF & POTLER, AARON	First Occurrence Prime Gaps . . . . .	221
ZENNARO, M.	<i>See: BELLEN, A., JACKIEWICZ, Z., VERMIGLIO, R. &amp; ZENNARO, M. . . . .</i>	49