

# VOLUME XXXVIII

## AUTHOR INDEX

<i>Author</i>	<i>Title</i>	<i>Page</i>
ALFELD, PETER	Fixed Point Iteration with Inexact Function Values.....	87
ARCHER, DAVID & DÍAZ, JULIO CÉSAR	A Collocation-Galerkin Method for a First Order Hyperbolic Equation With Space and Time-Dependent Coefficient.....	37
ARNOLD, DOUGLAS N. & WINTHER, RAGNAR	A Superconvergent Finite Element Method for the Korteweg-de Vries Equation.....	23
ARYA, J. P.	See: JOSHI, C. M. & ARYA, J. P.....	201
BECK, WALTER E. & NAJAR, RUDOLPH M.	A Lower Bound for Odd Triperfects.....	249
BEIGHTON, S. & NOBLE, B.	An Error Estimate for Stenger's Quadrature Formula.....	539
BELEVITCH, V. & BOERSMA, J.	On Stieltjes Integral Transforms Involving $\Gamma$ -Functions.....	223
BOERSMA, J.	See: BELEVITCH, V. & BOERSMA, J.....	223
BRENT, RICHARD P.	Succinct Proofs of Primality for the Factors of Some Fermat Numbers.....	253
BRUNOTTE, HORST	The Computation of a Certain Metric Invariant of an Algebraic Number Field.....	627
BUHLER, J. P., CRANDALL, R. E. & PENK, M. A.	Primes of the Form $n! \pm 1$ and $2 \cdot 3 \cdot 5 \cdots p \pm 1$ .....	639
BUNCH, JAMES R.	A Note on the Stable Decomposition of Skew-Symmetric Matrices.....	475
CANUTO, C. & QUARTERONI, A.	Approximation Results for Orthogonal Polynomials in Sobolev Spaces.....	67
CHAMBERS, LI. G.	An Upper Bound for the First Zero of Bessel Functions.....	589
CHEN, T. H. CHARLES	Asymptotic Error Estimates for Gaussian Quadrature Formulas.....	143
COHN, HARVEY	An Explicit Modular Equation in Two Variables and Hilbert's Twelfth Problem.....	227
CONDE, SALVADOR	See: KALLA, SHYAM L., CONDE, SALVADOR & LUKE, YUDELL L.	207
COSTELLO, PATRICK J.	Density Problems Involving $p_r(n)$ .....	633
CRANDALL, R. E.	See: BUHLER, J. P., CRANDALL, R. E. & PENK, M. A. ....	639
CRISCI, M. R. & RUSSO, E.	$A$ -Stability of a Class of Methods for the Numerical Integration of Certain Linear Systems of Ordinary Differential Equations.....	431
CUYT, ANNIE A. M.	Numerical Stability of the Halley-Iteration for the Solution of a System of Nonlinear Equations.....	171
DENNIS, J. E., JR. & MARWIL, EARL S.	Direct Secant Updates of Matrix Factorizations.....	459
DÍAZ, JULIO CÉSAR	See: ARCHER, DAVID & DÍAZ, JULIO CÉSAR.....	37
DiDONATO, A. R.	Recurrence Relations for the Indefinite Integrals of the Associated Legendre Functions.....	547
FORD, WILLIAM F.	See: SMITH, DAVID A. & FORD, WILLIAM F.....	481
FRANKE, RICHARD	Scattered Data Interpolation: Tests of Some Methods.....	181
FRANSÉN, ARNE	See: WRIGGE, STAFFAN & FRANSÉN, ARNE.....	567
GOSTIN, GARY B. & McLAUGHLIN, PHILIP B., JR.	Six New Factors of Fermat Numbers.....	645
GREAVES, G.	An Algorithm for the Solution of Certain Differential-Difference Equations of Advanced Type.....	237

<i>Author</i>	<i>Title</i>	<i>Page</i>
GUPTA, G. K.	See: KOVVALI, S. & GUPTA, G. K.....	447
HALPERN, LAURENCE	Absorbing Boundary Conditions for the Discretization Schemes of the One-Dimensional Wave Equation.....	415
HAN, HOUDE	The Finite Element Method in a Family of Improperly Posed Problems.....	55
HILLIKER, DAVID LEE	An Algorithm for Solving a Certain Class of Diophantine Equations. I.....	611
ISERLES, ARIEH	Composite Exponential Approximations.....	99
JOHNSON, CLAES & PITKÄRANTA, JUHANI	Analysis of Some Mixed Finite Element Methods Related to Reduced Integration.....	375
JOSHI, C. M. & ARYA, J. P.	Inequalities for Certain Hypergeometric Functions.....	201
KALLA, SHYAM L., CONDE, SALVADOR & LUKE, YUDELL L.	Integrals of Jacobi Functions.....	207
KALLMAN, RALPH	A Method for Finding Permanents of 0, 1 Matrices.....	167
KOVVALI, S. & GUPTA, G. K.	Polynomial Formulation of Second Derivative Multistep Methods.....	447
LADERMAN, JACK & LADERMAN, JULIAN D.	Simplified Forecasting by Polynomial Regression With Equally Spaced Values of the Independent Variable.....	601
LADERMAN, JULIAN D.	See: LADERMAN, JACK & LADERMAN, JULIAN D.....	601
LASKA, MICHAEL	An Algorithm for Finding a Minimal Weierstrass Equation for an Elliptic Curve.....	257
LEVIN, DAVID	Procedures for Computing One- and Two-Dimensional Inte- grals of Functions With Rapid Irregular Oscillations.....	531
LING, CHIH-BING	Evaluation of Generalized Howland Integrals.....	593
LING, CHIH-BING & WU, MING-JING	Evaluation of Integrals of Howland Type Involving a Bessel Function.....	215
LUKE, YUDELL L.	See: KALLA, SHYAM L., CONDE, SALVADOR & LUKE, YUDELL L.....	207
McLAUGHLIN, PHILIP B., JR.	See: GOSTIN, GARY B. & McLAUGHLIN, PHILIP B., JR.	645
MARSDEN, M. J.	Spline Interpolation at Knot Averages on a Two-Sided Geometric Mesh.....	113
MARWIL, EARL S.	See: DENNIS, J. E., JR. & MARWIL, EARL S.....	459
NAJAR, RUDOLPH M.	See: BECK, WALTER E. & NAJAR, RUDOLPH M.....	249
NÉMETH, GÉZA & ZIMÁNYI, MAGDA	Polynomial Type Padé Approximants.....	553
NOBLE, B.	See: BEIGHTON, S. & NOBLE, B.....	539
OSHER, STANLEY & SOLOMON, FRED	Upwind Difference Schemes for Hyperbolic Systems of Con- servation Laws.....	339
PARLETT, B. N., SIMON, H. & STRINGER, L. M.	On Estimating the Largest Eigenvalue With the Lanczos algorithm.....	153
PENK, M. A.	See: BUHLER, J. P., CRANDALL, R. E. & PENK, M. A.....	639
PITKÄRANTA, JUHANI	See: JOHNSON, CLAES & PITKÄRANTA, JUHANI.....	375
POHST, MICHAEL, WEILER, PETER & ZASSENHAUS, HANS	On Effective Computation of Fundamental Units. II.....	293
POHST, MICHAEL & ZASSENHAUS, HANS	On Effective Computation of Fundamental Units. I.....	275
QUARTERONI, A.	See: CANUTO, C. & QUARTERONI, A.....	67
RANNACHER, ROLF & SCOTT, RIDGWAY	Some Optimal Error Estimates for Piecewise Linear Finite Element Approximations.....	437
RUSSO, E.	See: CRISCI, M. R. & RUSSO, E.....	431
SCHATZ, A. H. & WAHLBIN, L. B.	On the Quasi-Optimality in $L_\infty$ of the $\mathcal{H}^1$ -Projection Into Finite Element Spaces.....	1
SCOTT, RIDGWAY	See: RANNACHER, ROLF & SCOTT, RIDGWAY.....	437

<i>Author</i>	<i>Title</i>	<i>Page</i>
SIDI, AVRAM	Numerical Quadrature Rules for Some Infinite Range Integrals.....	127
SIDI, AVRAM	The Numerical Evaluation of Very Oscillatory Infinite Integrals by Extrapolation.....	517
SIMON, H.	See: PARLETT, B. N., SIMON, H. & STRINGER, L. M.....	153
SMITH, DAVID A. & FORD, WILLIAM F.	Numerical Comparisons of Nonlinear Convergence Accelerators.....	481
SOLOMON, FRED	See: OSHER, STANLEY & SOLOMON, FRED.....	339
STRINGER, L. M.	See: PARLETT, B. N., SIMON, H. & STRINGER, L. M.	153
THOMPSON, J. F.	See: WARSI, Z. U. A. & THOMPSON, J. F.....	501
WAHLBIN, L. B.	See: SCHATZ, A. H. & WAHLBIN, L. B.....	1
Warsi, Z. U. A. & THOMPSON, J. F.	A Noniterative Method for the Generation of Orthogonal Coordinates in Doubly-Connected Regions.....	501
WEILER, PETER	See: POHST, MICHAEL, WEILER, PETER & ZASSENHAUS, HANS.....	293
WERSCHULZ, ARTHUR G.	Optimal Error Properties of Finite Element Methods for Second Order Elliptic Dirichlet Problems.....	401
WILLIAMS, H. C.	Determination of Principal Factors in $\mathcal{Q}(\sqrt{D})$ and $\mathcal{Q}(\sqrt[3]{D})$ .....	261
WINTHER, RAGNAR	See: ARNOLD, DOUGLAS N. & WINTHER, RAGNAR.....	23
WRIGGE, STAFFAN & FRANSÉN, ARNE	A General Method of Approximation. Part I.....	567
WU, MING-JING	See: LING, CHIH-BING & WU, MING-JING.....	215
ZASSENHAUS, HANS	See: POHST, MICHAEL & ZASSENHAUS, HANS.....	275
ZASSENHAUS, HANS	See: POHST, MICHAEL, WEILER, PETER & ZASSENHAUS, HANS.....	293
ZIMÁNYI, MAGDA	See: NÉMETH, GÉZA & ZIMÁNYI, MAGDA.....	553