

**VOLUME XLII**  
**AUTHOR INDEX**

| <i>Author</i>  | <i>Title</i>   | <i>Page</i> |
|--|--|-------------|
| BERGER, ALAN E.,<br>HAN, HOUDE &<br>KELLOGG, R. BRUCE                      | A Priori Estimates and Analysis of a Numerical Method<br>for a Turning Point Problem .....   | 465         |
| BOLEY, DANIEL &<br>GOLUB, GENE H.  | A Modified Method for Reconstructing Periodic Jacobi<br>Matrices .....   | 143         |
| BOYARSKY, ABRAHAM  | <i>See:</i> SCAROWSKY, MANNY & BOYARSKY, ABRAHAM .....   | 235         |
| BRAESS, DIETRICH   | The Convergence Rate of a Multigrid Method with Gauss-<br>Seidel Relaxation for the Poisson Equation.....  | 505         |
| BREMNER, A. &<br>CASSELS, J. W. S.   | On the Equation $Y^2 = X(X^2 + p)$ .....   | 257         |
| BROWN, DAVID L.  | A Note on the Numerical Solution of the Wave Equation<br>With Piecewise Smooth Coefficients .....  | 369         |
| BROWN, M. L.   | On the Diophantine Equation $\sum X_i = \prod X_i$ .....   | 239         |
| BRUNNER, HERMANN   | Implicit Runge-Kutta Methods of Optimal Order for<br>Volterra Integro-Differential Equations .....   | 95          |
| BYRD, PAUL F. &<br>STALLA, LAWRENCE  | Chebyshev Quadrature Rules for a New Class of Weight<br>Functions .....  | 173         |
| CASSELS, J. W. S.  | <i>See:</i> BREMNER, A. & CASSELS, J. W. S. ....   | 257         |
| CHAN, TONY F.  | On the Existence and Computation of <i>LU</i> -Factorizations<br>with Small Pivots.....  | 535         |
| CHEN, HAN-LIN &<br>HVARING, TRON   | Approximation of Complex Harmonic Functions by Com-<br>plex Harmonic Splines .....   | 151         |
| COHEN, H. &<br>LENSTRA, W. H., JR.   | Primality Testing and Jacobi Sums .....  | 297         |
| DUECK, G. W.   | <i>See:</i> WILLIAMS, H. C. & DUECK, G. W. ....  | 683         |
| ERIKSSON, KENNETH &<br>THOMÉE, VIDAR                                       | Galerkin Methods for Singular Boundary Value Problems<br>in One Space Dimension .....  | 345         |
| FERGUSON, H. R. P.,<br>MAJOR, R. D.,<br>POWELL, K. E. &<br>THROOLIN, H. G. | On Zeros of Mellin Transforms of $SL_2(\mathbb{Z})$ Cusp Forms ....  | 241         |
| FOSTER, D. M. E. &<br>PHILLIPS, G. M.                                      | The Arithmetic-Harmonic Mean .....   | 183         |
| FRANSÉN, ARNE &<br>WRIGGE, STAFFAN   | Calculation of the Moments and the Moment Generating<br>Function for the Reciprocal Gamma Distribution .....   | 601         |
| GARTLAND, EUGENE C., JR.   | Accurate Approximation of Eigenvalues and Zeros of<br>Selected Eigenfunctions of Regular Sturm-Liouville<br>Problems .....   | 427         |
| VON ZUR GATHEN, JOACHIM<br>GEVECI, TUNC                                    | Hensel and Newton Methods in Valuation Rings.....<br>On the Convergence of Galerkin Approximation Schemes<br>for Second-Order Hyperbolic Equations in Energy and<br>Negative Norms ..... | 637<br>393  |
| GODWIN, H. J.  | On Quartic Fields of Signature One With Small Discrimi-<br>nant. II.....   | 707         |
| GOLUB, GENE H.   | <i>See:</i> BOLEY, DANIEL & GOLUB, GENE H. ....  | 143         |
| GUPTA, HANSRAJ<br>HAN, HOUDE   | Diophantine Equations in Partitions.....<br><i>See:</i> BERGER, ALAN E., HAN, HOUDE & KELLOGG, R.<br>BRUCE .....   | 225<br>465  |
| HVARING, TRON  | <i>See:</i> CHEN, HAN-LIN & HVARING, TRON.....   | 151         |
| IGARASHI, MASAO  | A Termination Criterion for Iterative Methods Used to<br>Find the Zeros of Polynomials.....  | 165         |

| <i>Author</i>                           | <i>Title</i>   | <i>Page</i> |
|---|--|-------------|
| KELLOGG, R. BRUCE                       | <i>See:</i> BERGER, ALAN E., HAN, HOUDE & KELLOGG, R. BRUCE .....  | 465         |
| KISHORE, MASAO                          | Odd Triperfect Numbers.....  | 231         |
| LAFORGIA, ANDREA                        | Further Inequalities for the Gamma Function .....  | 597         |
| LENSTRA, H. W., JR.                     | Divisors in Residue Classes.....   | 331         |
| LENSTRA, W. H., JR.                     | <i>See:</i> COHEN, H. & LENSTRA, W. H., JR. ....   | 297         |
| MCCURLEY, KEVIN S.                      | Explicit Estimates for the Error Term in the Prime Number Theorem for Arithmetic Progressions .....                                      | 265         |
| MCCURLEY, KEVIN S.                      | Explicit Estimates for $\theta(x; 3, l)$ and $\psi(x; 3, l)$ .....   | 287         |
| MAJOR, R. D.                            | <i>See:</i> FERGUSON, H. R. P., MAJOR, R. D., POWELL, K. E. & THROOLIN, H. G. ....   | 241         |
| MANSFIELD, RICHARD                      | A Complete Axiomatization of Computer Arithmetic.....  | 623         |
| MATTHEIJ, R. M. M. & STAARINK, G. W. M. | On Optimal Shooting Intervals.....   | 25          |
| MEYER, BURNETT                          | Some Inequalities for Elementary Mean Values .....   | 193         |
| MISICI, LUCIANO                         | Numerical Solution of Two Transcendental Equations .....   | 589         |
| NAKAO, MITSUHIRO                        | A Collocation- $H^{-1}$ -Galerkin Method for Some Elliptic Equations .....   | 417         |
| NEWMAN, MORRIS & SHANKS, DANIEL         | On a Sequence Arising in Series for $\pi$ .....  | 199         |
| PHILLIPS, G. M.                         | <i>See:</i> FOSTER, D. M. E. & PHILLIPS, G. M. ....  | 183         |
| PIESSENS, R.                            | A Series Expansion for the First Positive Zero of the Bessel Functions .....   | 195         |
| POWELL, K. E.                           | <i>See:</i> FERGUSON, H. R. P., MAJOR, R. D., POWELL, K. E. & THROOLIN, H. G. ....   | 241         |
| TE RIELE, HERMAN J. J.                  | On Generating New Amicable Pairs from Given Amicable Pairs.....  | 219         |
| RODRIGUE, GARRY & WOLITZER, DONALD      | Preconditioning By Incomplete Block Cyclic Reduction....   | 549         |
| SAAD, YUCEF                             | Chebyshev Acceleration Techniques for Solving Nonsymmetric Eigenvalue Problems.....  | 567         |
| SCAROWSKY, MANNY & BOYARSKY, ABRAHAM    | A Note on the Diophantine Equation $x^n + y^n + z^n = 3$ ....  | 235         |
| SHANKS, DANIEL                          | <i>See:</i> NEWMAN, MORRIS & SHANKS, DANIEL .....  | 199         |
| SHI, ZHONG-CI                           | On the Convergence Properties of the Quadrilateral Elements of Sander and Beckers.....   | 493         |
| SIMON, HORST D.                         | The Lanczos Algorithm With Partial Reorthogonalization .....   | 115         |
| SMYTH, C. J.                            | The Mean Values of Totally Real Algebraic Integers.....  | 663         |
| STAARINK, G. W. M.                      | <i>See:</i> MATTHEIJ, R. M. M. & STAARINK, G. W. M. ....   | 25          |
| STALLA, LAWRENCE                        | <i>See:</i> BYRD, PAUL F. & STALLA, LAWRENCE .....   | 173         |
| STEIHAUG, TROND                         | On the Sparse and Symmetric Least-Change Secant Update.....  | 521         |
| STENBERG, ROLF                          | Analysis of Mixed Finite Element Methods for the Stokes Problem: A Unified Approach.....   | 9           |
| THOMÉE, VIDAR                           | <i>See:</i> ERIKSSON, KENNETH & THOMÉE, VIDAR .....  | 345         |
| THROOLIN, H. G.                         | <i>See:</i> FERGUSON, H. R. P., MAJOR, R. D., POWELL, K. E. & THROOLIN, H. G. ....   | 241         |
| WAHLBIN, LARS B.                        | On the Sharpness of Certain Local Estimates for $\hat{H}^1$ Projections into Finite Element Spaces: Influence of a Reentrant Corner..... | 1           |
| WEINMÜLLER, EWA                         | A Difference Method for a Singular Boundary Value Problem of Second Order .....  | 441         |
| WEISS, RICHARD                          | An Analysis of the Box and Trapezoidal Schemes for Linear Singularly Perturbed Boundary Value Problems .....                             | 41          |
| WERSCHULZ, ARTHUR G.                    | Does Increased Regularity Lower Complexity? .....  | 69          |

AUTHOR INDEX

717

| <i>Author</i>                     | <i>Title</i>   | <i>Page</i> |
|-----------------------------------|--|-------------|
| WILLIAMS, H. C. &<br>DUECK, G. W. | An Analogue of the Nearest Integer Continued Fraction for<br>Certain Cubic Irrationalities ..... | 683         |
| WILLIAMS, JACK                    | <i>See:</i> YOUNG, HUANG & WILLIAMS, JACK .....  | 111         |
| WOLITZER, DONALD                  | <i>See:</i> RODRIGUE, GARRY & WOLITZER, DONALD.....  | 549         |
| WRIGGE, STAFFAN                   | A Note on the Moment Generating Function for the Re-<br>ciprocal Gamma Distribution.....         | 617         |
| WRIGGE, STAFFAN                   | <i>See:</i> FRANSÉN, ARNE & WRIGGE, STAFFAN.....   | 601         |
| YOUNG, HUANG &<br>WILLIAMS, JACK  | A Note on An Algorithm for Interpolating Rationals.....  | 111         |