

VOLUME XIX

AUTHOR INDEX

Papers and Technical Notes

Short papers and notes are marked (N) in this index

| <i>Author</i> | | <i>Page</i> |
|--|---|-------------|
| ANDERSON, DONALD G. | Gaussian quadrature formulae for $\int_0^1 -\ln(x)f(x) dx$ (N)..... | 477 |
| AUMANN, R. J., PELEG, B. & RABINOWITZ, P. | A method for computing the kernel of n -person games..... | 531 |
| BAUMERT, L. D. & HALL, MARSHALL JR. | Hadamard matrices of the Williamson type..... | 442 |
| BEN-ISRAEL, ADI | An iterative method for computing the generalized inverse of an arbitrary matrix (N)..... | 451 |
| BROWN, ROBERT R., RILEY, JAMES D. & BENNETT, MORRIS M. | Stability properties of Adams-Moulton type methods..... | 90 |
| BROYDEN, C. G. | A class of methods for solving non-linear simultaneous equa- tions..... | 577 |
| BUTCHER, J. C. | On the attainable order of Runge-Kutta methods..... | 408 |
| CARLITZ, L. | The irreducibility of the Bernoulli polynomial $B_{14}(x)$ (N).... | 667 |
| CASSITY, C. R. | Abscissas, coefficients, and error term for the generalized Gauss-Laguerre quadrature formula using the zero ordinate. | 287 |
| CHURCH, ROBERT F. | On a constant in the theory of trigonometric series (N)..... | 501 |
| CODY, W. J. | Chebyshev approximations for the complete elliptic integrals K and E | 105 |
| CODY, W. J. | Chebyshev polynomial expansions of complete elliptic inte- grals..... | 249 |
| COHN, HARVEY | A numerical survey of the floors of various Hilbert funda- mental domains..... | 594 |
| COOLEY, JAMES W. & TUKEY, JOHN W. | An algorithm for the machine calculation of complex Fourier series..... | 297 |
| DELVES, L. M. | Variation principles for an arbitrary operator III..... | 380 |
| DERZKO, N. A. & PFEFFER, A. M. | Bounds for the spectral radius of a matrix..... | 62 |
| ELLIOTT, DAVID | Truncation errors in two Chebyshev series approximations.. | 234 |
| ELLIOTT, DAVID & SZEKERES, GEORGE | Some estimates of the coefficients in the Chebyshev series expansion of a function..... | 25 |
| FETTIS, HENRY E. | Calculation of elliptic integrals of the third kind by means of Gauss' transformation..... | 97 |
| FIELDS, JERRY L. | Rational approximations to generalized hypergeometric functions..... | 606 |
| FOSDICK, LLOYD D. | Approximation of a class of Wiener integrals..... | 225 |
| FRANKE, CHARLES H. | Numerical evaluation of the elliptic integral of the third kind (N)..... | 494 |
| FRANKLIN, JOEL N. | Difference methods for stochastic ordinary differential equa- tions..... | 552 |
| GARY, JOHN | Hyman's method applied to the general eigenvalue problem (N)..... | 314 |
| GARY, JOHN | Computing eigenvalues of ordinary differential equations by finite differences..... | 365 |
| GLODEN, A. | New primes of the form $n^4 + 1$ (N)..... | 144 |
| GOODMAN, THEODORE R. | The numerical solution of eigenvalue problems (N)..... | 462 |

| | <i>Page</i> |
|---|-------------|
| HAYASHI, HARRY S. | 73 |
| HEATLEY, A. H. | 118 |
| HOFFMAN, A. J. | 56 |
| ISEMONGER, K. R. | 145 |
| JAGERMAN, D. L. | 418 |
| JAMES, WENDY & JARRATT, P. | 497 |
| JOHNSON, SELMER M. | 675 |
| KEEDWELL, A. D. | |
| KELLOGG, R. B. & SPANIER, J. | 317 |
| KONHEIM, ALAN G. | |
| LAMBERT, JOHN D. & SHAW, BRIAN | 448 |
| LEE, NANCY & STROUD, A. H. | 143 |
| LESZCZYŃSKI, BOGUMIL LING, CHIH-BING | 456 |
| LING, CHIH-BING | 322 |
| LING, CHIH-BING & WU, HSIEN-CHUEH | |
| LO, Y. T., LEE, S. W. & SUN, B. | 658 |
| LUKE, YUDELL L., ET AL. | 487 |
| LYNESS, J. N. | |
| LYNESS, J. N. | 133 |
| LYNESS, J. N. | 501 |
| LYNESS, J. N. | |
| LYNESS, J. N. | 260 |
| LYNESS, J. N. | 394 |
| MACK, LAWRENCE R. | |
| MAYOH, B. H. | 471 |
| MCANDREW, M. H. | |
| MEDHURST, R. G. & ROBERTS, J. H. | 625 |
| METROPOLIS, N. & ASHENHURST, R. L. | |
| NASHED, M. Z. | 638 |
| OLUNLOYO, V. O. S. | |
| ORMONDE, STEPHAN & DICK, JERALD S. | 654 |
| On general iterative methods for the solutions of a class of non- linear operator equations..... | 14 |
| A special technique for the determination of eigenvalues (N) .. | 466 |
| A method of calculation of integrals of products of radial atomic wave functions (N)..... | 647 |
| On the sum of the series $\sum_{r=0}^{\infty} t^r / [uv + m]!$ (N)..... | 677 |
| Tables of values of σ_2 , relating to Weierstrass' elliptic func- tion (N)..... | 123 |
| Evaluation at half periods of Weierstrass' elliptic functions with double periods 1 and e^{ia} (N)..... | 138 |
| Tables of values of three infinite integrals (N) | 487 |
| On Davis' method of estimating quadrature errors (N) | 487 |
| Symmetric integration rules for hypercubes. I. Error co- efficients..... | 260 |
| Symmetric integration rules for hypercubes. II. Rule projec- tion and rule extension..... | 394 |
| Integration rules of hypercubic symmetry over a certain spherically symmetric space (N)..... | 471 |
| Symmetric integration rules for hypercubes. III. Construc- tion of integration rules using null rules..... | 625 |
| Limits on the number of function evaluations required by certain high-dimensional integration rules of hypercubic symmetry..... | 638 |
| Bessel-function identities needed for the theory of axisym- metric gravity waves (N)..... | 654 |
| A graph technique for inverting certain matrices (N) | 644 |
| An algorithm for solving a polynomic congruence, and its application to error-correcting codes..... | 68 |
| Evaluation of the integral $I_n(b) = 2\pi^{-1} \int_0^\infty (\sin x/x)^n$ $\cos(bx) dx$ | 113 |
| Radix conversion in an unnormalized arithmetic system | 435 |

| | <i>Page</i> |
|--|-------------|
| PEARSON, CARL E. | 570 |
| PETRYSHYN, W. V. | |
| PRICE, H. S. | |
| RAZELOS, P. | |
| RIGLER, A. K. | |
| ROBERTS, JERRY ALLAN | |
| ROBINSON, RAPHAEL M. | |
| SECREST, DON | |
| SHAMPINE, LAWRENCE F. | |
| SIEGEL, IRVING H. | |
| SIMON, W. E. | |
| SMITH, F. J. | |
| SPRUNG, DONALD W. L. & HUGHES, D. J. | |
| STEIN, M. L. & STEIN, P. R. | |
| STERNBERG, H. M. & DIAZ, J. B. | |
| STETTER, HANS J. | 84 |
| STRAND, OTTO NEALL | |
| SUTHERLAND, C. D. | |
| TAUSWORTHE, ROBERT C. | |
| THOMPSON, G. T. | |
| TRAUB, J. F. | |
| VERMA, ARUN | |
| WADSWORTH, DONALD | |
| WELLS, JACQUELINE & MUSKAT, JOSEPH | |
| WENDROFF, BURTON | |
| WHITNEY, E. L. | |
| WIDLUND, OLOF B. | |
| WILLIAMS, H. C., GERMAN, R. A. & ZARNKE, C. R. | |
| YANG, C. H. | |
| Impulsive end condition for diffusion equation | 570 |
| On the extrapolated Jacobi or simultaneous displacements method in the solution of matrix and operator equations | 37 |
| A practical application of block diagonally dominant matrices (N) | 307 |
| A new integral representation of the Bessel coefficients (N) | 130 |
| Estimation of the successive over-relaxation factor (N) | 302 |
| Computation of moments of $K_r(t)/I_r(t)$ (N) | 651 |
| Some conjectures about cyclotomic integers | 210 |
| Best approximate integration formulas and best error bounds | 79 |
| Quadrature formulas using derivatives (N) | 481 |
| Deferment of computation in the method of least squares (N) | 329 |
| Numerical technique for solution and error estimate for the initial value problem | 387 |
| An algorithm for summing orthogonal polynomial series and their derivatives with applications to curve-fitting and interpolation | 33 |
| Gauss weights and ordinates for $\int_0^1 f(x)x^2 dx$ (N) | 139 |
| Experimental results on additive 2-bases | 427 |
| Computation of the Riemann function for the operator $\partial^n/\partial x_1 \partial x_2 \cdots \partial x_n + a(x_1, x_2, \dots, x_n)$ | 562 |
| Stabilizing predictors for weakly unstable correctors | 127 |
| A method for the computation of the error function of a com- plex variable (N) | 132 |
| Footnote to the evaluation of certain complex elliptic integrals (N) | 201 |
| Random numbers generated by linear recurrence modulo two | 661 |
| The asymptotic expansion of the integrals psi and chi in terms of Tchebycheff polynomials (N) | 177 |
| Generalized sequences with applications to the discrete calculus | 327 |
| A class of expansions of <i>G</i> -functions and the Laplace trans- form (N) | 483 |
| Improved asymptotic expansion for the exponential integral with positive argument (N) | 218 |
| On the number of solutions of certain trinomial congruences (N) | 1 |
| Bounds for eigenvalues of some differential operators by the Rayleigh-Ritz method | 277 |
| Estimates of weights in Gauss-type quadrature | 1 |
| On the stability of parabolic difference schemes | 671 |
| Solution of the cattle problem of Archimedes (N) | 455 |
| A note on the maximum value of determinants over the com- plex field (N) | 455 |

INDEX OF REVIEWS BY AUTHOR OF WORK REVIEWED

| <i>Author</i> | <i>Review Number</i> | <i>Table Classification</i> | <i>Page</i> |
|------------------------------|----------------------|-----------------------------|-------------|
| ABRAHAMSON, I. G. | 7 | [K] | 152 |
| ABRAMOWITZ, MILTON, Editor | 1 | [A—F, H—M, R, S, X] | 147 |
| ALBASINY, E. L. | 16 | [M, X] | 157 |
| ALEXANDROFF, P. S. | 115 | [G] | 687 |
| ALT, FRANZ L., Editor | 62 | [Z] | 351 |
| ALT, FRANZ, L., Editor | 102 | [Z] | 523 |
| ANDERSEN, C. | 63 | [Z] | 352 |
| ARMERDING, G. | 73 | [F] | 503 |
| ARSCOTT, F. M. | 126 | [L, M] | 693 |
| ARSHAM, ISABELLE | 118 | [H] | 688 |
| ATOJI, M. | 124 | [L] | 692 |
| ATOJI, M. | 125 | [L, S] | 692 |
| BAILEY, NORMAN T. J. | 8 | [K] | 153 |
| BAKHVALOV, H. C. | 88 | [S, X] | 513 |
| BALAKRISHNAN, A. V., Editor | 99 | [X, Z] | 520 |
| BATEMAN, PAUL T. | 112 | [F] | 684 |
| BAUER, F. L. | 25 | [Z] | 166 |
| BAUER, KARL WILHELM | 59 | [X] | 349 |
| BAUMANN, R. | 25 | [Z] | 166 |
| BAUMGARTNER, LUDWIG | 74 | [G] | 505 |
| BECKENBACH, EDWIN F., Editor | 89 | [X] | 513 |
| BEILER, ALBERT H. | 109 | [F] | 682 |
| BELL, R. J. | 16 | [M, X] | 157 |
| BELLMAN, RICHARD, Editor | 90 | [X] | 514 |
| BELYAKOV, V. M. | 127 | [L, M] | 694 |
| BENNETT, B. M. | 121 | [K] | 691 |
| BÖHLING, KARL-HEINZ | 64 | [Z] | 353 |
| BOLLIEU, L. | 26 | [Z] | 168 |
| BOLTYANSKII, V. G. | 18 | [P, X] | 159 |
| BOWMAN, HOWARD S. | 100 | [X, Z] | 522 |
| BROWN, ORLEY E. | 132 | [M] | 698 |
| BURINGTON, RICHARD S. | 72 | [A—E, G—O, P, S] | 503 |
| BURNETT-HALL, D. G. | 27 | [Z] | 168 |
| BUTCHER, J. C. | 56 | [X] | 348 |
| CASLIN, JAMES C. | 81 | [L, M] | 509 |
| CHUNIKHIN, C. A. | 75 | [G] | 505 |
| CIRIANI, T. A. | 119 | [H] | 690 |
| CLAASSEN, R. W. | 21 | [V, X] | 163 |
| CLARK, F. L. | 124 | [L] | 692 |
| CLARK, F. L. | 125 | [L, S] | 692 |
| CODY, W. J. | 47 | [L] | 342 |
| COLBERT, HARRY M. | 91 | [X] | 515 |
| CONTI, R. | 133 | [M] | 699 |
| COOPER, J. R. A. | 16 | [M, X] | 157 |
| COXETER, H. S. M. | 116 | [G] | 688 |
| CURTIS, A. R. | 10 | [L] | 154 |
| CURTIS, A. R. | 46 | [L] | 341 |
| CUTLER, DONALD I. | 103 | [Z] | 524 |
| DAVIS, HAROLD T. | 131 | [L, X] | 696 |
| DJOKOVIĆ, D. Ž. | 108 | [B, I, L] | 681 |
| DODES, IRVING ALLEN | 28 | [Z] | 169 |
| DODES, IRVING ALLEN | 57 | [X] | 348 |
| DOUGHERTY, H. T. | 122 | [L] | 691 |

| <i>Author</i> | <i>Review Number</i> | <i>Table Classification</i> | <i>Page</i> |
|-----------------------------|----------------------|-----------------------------|-------------|
| DRESEL, L. A. G. | 27 | [Z] | 168 |
| DUBISCH, ROY | 65 | [Z] | 353 |
| EL'SGOL'C, L. È. | 58 | [X] | 349 |
| EMERSLEBEN, OTTO | 130 | [L, V] | 695 |
| FADDEYEV, D. K. | 76 | [G] | 506 |
| FANO, ROBERT M. | 79 | [K, X] | 507 |
| FEJES TÓTH, L. | 24 | [X] | 166 |
| FELICIANO, M. | 25 | [Z] | 166 |
| FETTIS, HENRY E. | 81 | [L, M] | 509 |
| FISHERKELLER, M. A. | 47 | [L] | 342 |
| FOX, L. | 40 | [G, X] | 337 |
| FOX, L. | 117 | [G, X] | 688 |
| FRISIANI, A. L. | 119 | [H] | 690 |
| FROESE, CHARLOTTE | 104 | [Z] | 525 |
| GAIER, DIETER | 134 | [X] | 699 |
| GAMKRELIDZE, R. V. | 18 | [P, X] | 159 |
| GASS, SAUL I. | 55 | [W, X, Z] | 347 |
| GASTINEL, N. | 26 | [Z] | 168 |
| GERMAN, R. A. | 114 | [F] | 686 |
| GINSBURG, SEYMOUR | 29 | [Z] | 169 |
| GOODWIN, NORTON | 2 | [D] | 149 |
| GREITZER, SAMUEL L. | 57 | [X] | 348 |
| GRUENBERGER, F. | 73 | [F] | 503 |
| GUTENMAKHER, L. I. | 66 | [Z] | 354 |
| HAHN, DIETRICH | 54 | [S] | 346 |
| HALL, MARSHALL JR. | 39 | [G] | 335 |
| HANSCOMB, D. C. | 45 | [K, X] | 340 |
| HAMMERSLEY, J. M. | 45 | [K, X] | 340 |
| HANSEN, A. G. | 12 | [L] | 155 |
| HANSEN, ARTHUR G. | 84 | [P, X] | 511 |
| HARRIS, THEODORE E. | 67 | [Z] | 355 |
| HARVEY, ATHENA | 14 | [L, M] | 155 |
| HEATLEY, A. H. | 48 | [L] | 343 |
| HENRICI, PETER | 6 | [I, X] | 152 |
| HENRICI, PETER | 92 | [X] | 516 |
| HODGMAN, CHARLES D., Editor | 107 | [A-F, K-N, Q] | 680 |
| HORN, ROGER A. | 112 | [F] | 684 |
| HORST, C. | 121 | [K] | 691 |
| HUSKEY, H. D., Editor | 68 | [Z] | 355 |
| ISAACS, RUFUS | 135 | [X] | 700 |
| JAMES, M. L. | 85 | [P, X, Z] | 511 |
| JOHNSON, M. E. | 122 | [L] | 691 |
| JOHNSTON, J. R. | 49 | [L] | 343 |
| KALABA, ROBERT, Editor | 90 | [X] | 514 |
| KARMAZINA, L. N. | 123 | [L] | 692 |
| KARPOV, K. A. | 128 | [L, M] | 694 |
| KIBEL', I. A. | 20 | [V] | 162 |
| KIRK, ALAN | 52 | [L, M] | 344 |
| KORN, G. A., Editor | 68 | [Z] | 355 |
| KOVACH, LADIS D. | 137 | [X, Z] | 702 |
| KRAVITZ, SIDNEY | 113 | [F] | 686 |
| KRAVTSOVA, R. I. | 127 | [L, M] | 694 |
| KRUGLIKOVÁ, L. | 17 | [M, X] | 158 |
| LANDER, LEON J. | 37 | [F] | 334 |
| LAURENT, P. J. | 26 | [Z] | 168 |

| <i>Author</i> | <i>Review Number</i> | <i>Table Classification</i> | <i>Page</i> |
|-----------------------------|----------------------|-----------------------------|-------------|
| LAYTON, L. L. | 51 | [L] | 344 |
| LEVINE, LEON | 44 | [K, P, Z] | 339 |
| LING, CHIH-BING | 11 | [L] | 155 |
| LINNIK, JU. V. | 110 | [F] | 683 |
| LUKE, SIU-KAY | 50 | [L] | 343 |
| MADACHY, JOSEPH S. | 113 | [F] | 686 |
| MALEY, GERALD A. | 105 | [Z] | 525 |
| MANKOPF, JURGEN RICHARD | 82 | [L, Z] | 509 |
| MANSELL, W. E. | 35 | [A, C] | 332 |
| MARCUS, MARVIN | 3 | [G, X] | 150 |
| McCORMICK, JOHN M. | 101 | [X, Z] | 523 |
| MEINARDUS, GÜNTER | 93 | [X] | 517 |
| METROPOLIS, N., Editor | 61 | [X, Z] | 350 |
| MIJARES, TITO A. | 42 | [K] | 338 |
| MINC, HENRYK | 3 | [G, X] | 150 |
| MISHCHENKO, E. F. | 18 | [P, X] | 159 |
| MITRINović, D. S. | 5 | [I] | 151 |
| MITRINović, D. S. | 94 | [X] | 517 |
| MITRINović, D. S. | 108 | [B, I, L] | 681 |
| MITRINović, D. S. | 120 | [I] | 690 |
| MITRINović, R. S. | 5 | [I] | 151 |
| MITRINović, R. S. | 120 | [I] | 690 |
| MOORE, EDWARD F., Editor | 30 | [Z] | 171 |
| MORRIS, MAX | 132 | [M] | 698 |
| MOSER, W. O. J. | 116 | [G] | 688 |
| MUNRO, WILLIAM D. | 33 | [Z] | 172 |
| NA, T. Y. | 12 | [L] | 155 |
| NEUSTADT, LUCIEN W., Editor | 99 | [X, Z] | 520 |
| NEWELL, ALLEN | 69 | [Z] | 356 |
| NEWMAN, JAMES R. | 22 | [X] | 164 |
| NICKEL, KARL | 70 | [Z] | 358 |
| NIELSEN, KAJ L. | 23 | [X] | 165 |
| NOBLE, BEN | 136 | [X] | 701 |
| NORTON, KARL K. | 38 | [F] | 334 |
| PARKIN, THOMAS R. | 37 | [F] | 334 |
| PESCHL, ERNST | 59 | [X] | 349 |
| PESCHON, JOHN, Editor | 86 | [P, Z] | 512 |
| PONTRYAGIN, L. S. | 18 | [P, X] | 159 |
| PRAGER, WILLIAM | 138 | [X, Z] | 702 |
| RATCLIFFE, J. F. | 34 | [Z] | 173 |
| RAISBECK, GORDON | 71 | [Z] | 359 |
| RAPPoPORT, M. G. | 127 | [L, M] | 694 |
| RICE, JOHN R. | 95 | [X] | 518 |
| RICHARDS, CHARLES H. | 118 | [H] | 688 |
| RUBINOFF, MORRIS, Editor | 62 | [Z] | 351 |
| RUBINOFF, MORRIS, Editor | 102 | [Z] | 523 |
| SALVADORI, MARIO G. | 101 | [X, Z] | 523 |
| SALZER, HERBERT E. | 118 | [H] | 688 |
| SAMELSON, K. | 25 | [Z] | 166 |
| SAMET, P. A. | 27 | [Z] | 168 |
| SANSONE, G. | 133 | [M] | 699 |
| SCHNEIDER, HANS, Editor | 77 | [G, X] | 506 |
| SCHRÖDER, GERHARD | 78 | [G, X] | 507 |
| SCHULTZ, LOUISE | 31 | [Z] | 171 |

| <i>Author</i> | <i>Review Number</i> | <i>Table Classification</i> | <i>Page</i> |
|------------------------------------|----------------------|-----------------------------|-------------|
| SELBY, SAMUEL M. | 107 | [A—F, K—N, Q] | 680 |
| SENIOR, JAMES K. | 39 | [G] | 335 |
| SHERMAN, PHILIP M. | 32 | [Z] | 172 |
| SINGER, JAMES | 96 | [X] | 518 |
| SKIKO, EDWARD | 105 | [Z] | 525 |
| SKOBŁIA, N. | 15 | [L, M] | 156 |
| SMIRNOV, N. V., Editor | 129 | [L, M] | 694 |
| SMITH, G. M. | 85 | [P, X, Z] | 511 |
| SPIRA, ROBERT | 13 | [L] | 155 |
| SPIRA, ROBERT | 80 | [L] | 508 |
| STATISTICAL ENGINEERING LABORATORY | 9 | [K] | 153 |
| STEGUN, IRENE A., Editor | 1 | [A—F, H—M, R, S, X] | 147 |
| STEIN, MARVIN L. | 33 | [Z] | 172 |
| STEIN, M. L. | 36 | [F] | 332 |
| STEIN, P. R. | 36 | [F] | 332 |
| STUCKEY, M. M. | 51 | [L] | 344 |
| TAUB, A. H., General Editor | 53 | [Q, V, X] | 346 |
| THORNE, C. J. | 21 | [V, X] | 163 |
| TRAUB, J. F. | 4 | [H, X] | 151 |
| TROLLHANN, LILLIAN | 139 | [Z] | 703 |
| TSYPKIN, YA. Z. | 19 | [P, X] | 161 |
| VILENKO, N. YA. | 97 | [X] | 519 |
| WAIT, J. R. | 83 | [M, S] | 510 |
| WALTERS, L. C. | 83 | [M, S] | 510 |
| WEAST, ROBERT C., Editor | 107 | [A—F, K—N, Q] | 680 |
| WEGNER, PETER, Editor | 106 | [Z] | 526 |
| WEISSMAN, STANLEY | 50 | [L] | 343 |
| WHITEMAN, ALBERT LEON, Editor | 111 | [F] | 683 |
| WILCOX, CALVIN H., Editor | 98 | [X] | 520 |
| WILLIAMS, H. C. | 114 | [F] | 686 |
| WINE, R. LOWELL | 43 | [K] | 339 |
| WITTMANN, ALFRED | 139 | [Z] | 703 |
| WOLFORD, J. C. | 85 | [P, X, Z] | 511 |
| WOLFOWITZ, J. | 87 | [P, Z] | 512 |
| WOOLDRIDGE, R. | 34 | [Z] | 173 |
| YOUDEN, W. W. | 140 | [Z] | 704 |
| YOUNG, ANDREW | 52 | [L, M] | 344 |
| ZARNKE, C. R. | 114 | [F] | 686 |
| ZHURINA, M. I. | 123 | [L] | 692 |
| ZUBOV, V. I. | 60 | [X] | 349 |
| ZURMÜHL, R. | 41 | [G, X] | 338 |

NOTES

| <i>Title</i> | <i>Page</i> |
|---|-------------|
| New Journal..... | 175 |
| Reviews and Descriptions of Tables and Books..... | 176 |
| New Publication..... | 364 |
| New Journal..... | 529 |

TABLE ERRATA

| No. | Author | Title | Page |
|-----|---|--|------|
| 362 | ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 174 |
| 365 | ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 360 |
| 373 | ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors, | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 527 |
| 376 | ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 705 |
| 366 | ERDÉLYI, A., MAGNUS, W., OBERHETTINGER, F. & TRICOMI, F. G. | <i>Higher Transcendental Functions</i> | 361 |
| 374 | ERDÉLYI, A., MAGNUS, W., OBERHETTINGER, F. & TRICOMI, F. G. | <i>Higher Transcendental Functions</i> | 527 |
| 367 | ERDÉLYI, A., MAGNUS, W., OBERHETTINGER, F. & TRICOMI, F. G. | <i>Tables of Integral Transforms</i> | 361 |
| 377 | HABERMAN, W. L. & HARLEY, E. E. | <i>Numerical Evaluation of Integrals containing Modified Bessel Functions</i> | 705 |
| 368 | HALL, MARSHALL JR. & SENIOR, JAMES K. | <i>The Groups of Order 2^n ($n \leq 6$)</i> | 362 |
| 371 | KENT, FREDERICK C. & KENT, MAUDE E. | <i>Compound Interest and Annuity Tables</i> | 363 |
| 369 | LOWELL, HERMAN H. | <i>Tables of the Bessel-Kelvin Functions Ber, Bei, Ker, Kei, and their Derivatives for the Argument Range 0(0.01)107.50.</i> | 362 |
| 364 | PEARSON, K. | <i>On the Construction of Tables and on Interpolation. Part I. Uni-variate Tables. Tracts for Computers</i> | 175 |
| 363 | PETERS, JEAN | <i>Eight-Place Tables of Trigonometric Functions for Every Second of Arc</i> | 174 |
| 378 | PETERS, JEAN | <i>Eight-Place Tables of Trigonometric Functions for Every Second of Arc</i> | 706 |
| 372 | POTIN, L. | <i>Formules et Tables Numériques relatives aux Fonctions Circulaires, Hyperboliques, Elliptiques</i> | 363 |
| 370 | SPENCELEY, G. W., SPENCELEY, R. M. & EPPERSON, E. R. | <i>Smithsonian Logarithmic Tables to Base e and Base 10</i> | 362 |
| 375 | WEAST, ROBERT C., SELBY, SAMUEL M. & HODGMAN, CHARLES D., Editors | <i>Handbook of Mathematical Tables</i> | 528 |

CORRIGENDA

| <i>Author</i> | <i>Title</i> | <i>Page</i> |
|--|--|-------------|
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 529 |
| FETTIS, HENRY E. | "On the numerical solution of equations of the Abel type"..... | 175 |
| LEHMER, D. H. | "Recent discoveries of large primes"..... | 175 |
| TEICHROEW, D. | "Use of continued fractions in high speed computing"..... | 706 |
| WIMP, JET | "Polynomial expansions of Bessel functions and some associated functions"..... | 175 |

REVIEWS BY SUBJECT

A. Arithmetical Tables, Mathematical Constants

| <i>Author</i> | <i>Review</i> | <i>Title</i> | <i>Page</i> |
|--|---------------|--|-------------|
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
| BURLINGTON, RICHARD S. MANSELL, W. E. | 72 | <i>Handbook of Mathematical Tables and Formulas</i> | 503 |
| | 35 | <i>Tables of Natural and Common Logarithms to 110 Decimals</i> | 332 |
| WEAST, ROBERT C., SELBY, SAMUEL M., & HODGMAN, CHARLES D., Editors | 107 | <i>Handbook of Mathematical Tables</i> | 680 |

B. Powers

| | | | |
|---|-----|---|-----|
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
| BURLINGTON, RICHARD S. MITRINović, D. S. & DJOKOVić, D. Ž. | 72 | <i>Handbook of Mathematical Tables and Formulas</i> | 503 |
| | 108 | <i>Specijalne Funkcije (Special Functions); Zbornik Matematičkih Problema (Collection of Mathematical Problems)</i> | 681 |
| WEAST, ROBERT C., SELBY, SAMUEL M. & HODGMAN, CHARLES D., Editors | 107 | <i>Handbook of Mathematical Tables</i> | 680 |

C. Logarithms

| | | | |
|---|-----|--|-----|
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
| BURLINGTON, RICHARD S. MANSELL, W. E. | 72 | <i>Handbook of Mathematical Tables and Formulas</i> | 503 |
| | 35 | <i>Tables of Natural and Common Logarithms to 110 Decimals</i> | 332 |
| WEAST, ROBERT C., SELBY, SAMUEL M. & HODGMAN, CHARLES D., Editors | 107 | <i>Handbook of Mathematical Tables</i> | 680 |

D. Circular Functions

| | | | |
|--|---|--|-----|
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
|--|---|--|-----|

| <i>Author</i> | <i>Review</i> | <i>Title</i> | <i>Page</i> |
|--|---------------|---|-------------|
| BURLINGTON, RICHARD S. GOODWIN, NORTON | 72 2 | <i>Handbook of Mathematical Tables and Formulas</i> <i>Seven Place Cosines, Sines and Tangents for Every Tenth Microturn</i> | 503 149 |
| WEAST, ROBERT C., SELBY, SAMUEL M. & HODGMAN, CHARLES D., Editors | 107 | <i>Handbook of Mathematical Tables</i> | 680 |

E. Hyperbolic and Exponential Functions

| | | | |
|--|-----------|---|------------|
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
| BURLINGTON, RICHARD S. WEAST, ROBERT C., SELBY, SAMUEL M. & HODGMAN, CHARLES D., Editors | 72 107 | <i>Handbook of Mathematical Tables and Formulas</i> <i>Handbook of Mathematical Tables</i> | 503 680 |

F. Theory of Numbers

| | | | |
|--|-----|---|-----|
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
| BATEMAN, PAUL T. & HORN, ROGER A. | 112 | "Primes represented by irreducible polynomials in one variable"..... | 684 |
| BEILER, ALBERT H. | 109 | <i>Recreations in the Theory of Numbers—The Queen of Mathematics Entertains</i> | 682 |
| GRUENBERGER, F. & ARMERDING, G. | 73 | <i>Statistics on the First Six Million Prime Numbers</i> | 503 |
| KRAVITZ, SIDNEY & MADACHY, JOSEPH S. | 113 | <i>Divisors of Mersenne Numbers $20,000 < p < 100,000$</i> | 686 |
| LINNIK, JU. V. | 110 | <i>The Dispersion Method in Binary Additive Problems</i> | 683 |
| NORTON, KARL K. | 38 | "Remarks on the number of factors of an odd perfect number"..... | 334 |
| PARKIN, THOMAS R. & LANDER, LEON J. | 37 | <i>Abundant Numbers</i> | 334 |
| STEIN, M. L. & STEIN, P. R. | 36 | <i>Tables of the Number of Binary Decompositions of All Even Numbers $0 < 2n < 200,000$ into Prime Numbers and Lucky Numbers</i> | 332 |
| WEAST, ROBERT C., SELBY, SAMUEL M. & HODGMAN, CHARLES D., Editors | 107 | <i>Handbook of Mathematical Tables</i> | 680 |
| WHITEMAN, ALBERT LEON, Editor | 111 | <i>Theory of Numbers</i> | 683 |
| WILLIAMS, H. C., GERMAN, R. A. & ZARNKE, C. R. | 114 | <i>Solution of the Cattle Problem of Archimedes</i> | 686 |

G. Higher Algebra

| | | | |
|------------------------|-----|---|-----|
| ALEXANDROFF, P. S. | 115 | <i>Introduction à la Théorie des Groupes</i> | 687 |
| BAUMGARTNER, LUDWIG | 74 | <i>Gruppentheorie</i> | 505 |
| BURLINGTON, RICHARD S. | 72 | <i>Handbook of Mathematical Tables and Formulas</i> | 503 |
| CHUNIKHIN, C. A. | 75 | <i>Podgruppy Konečnykh Grupp (Subgroups of Finite Groups)</i> | 505 |

| <i>Author</i> | <i>Review</i> | <i>Title</i> | <i>Page</i> |
|---|---------------|---|-------------|
| COXETER, H. S. M. & MOSER, W. O. J. | 116 | <i>Generators and Relations for Discrete Groups</i> | 688 |
| FADDEYEV, D. K. | 76 | <i>Tables of the Principal Unitary Representations of Fedorov Groups</i> | 506 |
| FOX, L. | 40 | <i>An Introduction to Numerical Linear Algebra</i> | 337 |
| FOX, L. | 117 | <i>An Introduction to Numerical Linear Algebra</i> | 688 |
| HALL, MARSHALL JR. & SENIOR, JAMES K. | 39 | <i>The Groups of Order $2^n(n \leq 6)$</i> | 335 |
| MARCUS, MARVIN & MINC, HENRYK | 3 | <i>A Survey of Matrix Theory and Matrix Inequalities</i> .. | 150 |
| SCHNEIDER, HANS, Editor | 77 | <i>Recent Advances in Matrix Theory</i> | 506 |
| SCHRÖDER, GERHARD | 78 | <i>Über die Konvergenz einiger Jacobi-Verfahren zur Bestimmung der Eigenwerte symmetrischer Matrizen</i> . .. | 507 |
| ZURMÜHL, R. | 41 | <i>Matrizen und ihre technischen Anwendungen</i> | 338 |
| H. Numerical Solution of Equations | | | |
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
| BURLINGTON, RICHARD S. | 72 | <i>Handbook of Mathematical Tables and Formulas</i> | 503 |
| CIRIANI, T. A. & FRISIANI, A. L. | 119 | <i>Tabulation of Solutions of the Cubic Equation $z^3 +$ $Az - A = 0$</i> | 690 |
| SALZER, HERBERT E., RICHARDS, CHARLES H. & ARSHAM, ISABELLE | 118 | <i>Table for the Solution of Cubic Equations</i> | 688 |
| TRAUB, J. F. | 4 | <i>Iterative Methods for the Solution of Equations</i> | 151 |
| I. Finite Differences, Interpolation | | | |
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
| BURLINGTON, RICHARD S. | 72 | <i>Handbook of Mathematical Tables and Formulas</i> | 503 |
| HENRICI, PETER | 6 | <i>Error Propagation for Difference Methods</i> | 152 |
| MITRINović, D. S. & DJOKović, D. Z. | 108 | <i>Specijalne Funkcije (Special Functions); Zbornik Matematičkih Problema (Collection of Mathematical Problems)</i> | 681 |
| MITRINović, D. S. & MITRINović, R. S. | 5 | <i>Tableaux d'une classe de nombres reliés aux nombres de Stirling II and III</i> | 151 |
| MITRINović, D. S. & MITRINović, R. S. | 120 | <i>Tableaux d'une classe de nombres reliés aux nombres de Stirling IV and V</i> | 690 |
| J. Summation of Series | | | |
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
| BURLINGTON, RICHARD S. | 72 | <i>Handbook of Mathematical Tables and Formulas</i> | 503 |
| K. Statistics | | | |
| ABRAHAMSON, I. G. | 7 | <i>A Table for Use in Calculating Orthant Probabilities of the Quadrivariate Normal Distribution</i> | 152 |
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
| BAILEY, NORMAN T. J. | 8 | <i>The Elements of Stochastic Processes with Applications to the Natural Sciences</i> | 153 |

| Author | Review | Title | Page |
|---|--------|--|------|
| BENNETT, B. M. & HORST, C. | 121 | Tables for Testing Significance in a 2×2 Contingency Table: Extension to Cases: $A = 41(1)50$ | 691 |
| BURLINGTON, RICHARD S. | 72 | Handbook of Mathematical Tables and Formulas..... | 503 |
| FANO, ROBERT M. | 79 | Transmission of Information, A Statistical Theory of Communications..... | 507 |
| HAMMERSLEY, J. M. & HANDSCOMB, D. C. | 45 | Monte Carlo Methods..... | 340 |
| LEVINE, LEON | 44 | Methods for Solving Engineering Problems Using Analog Computers..... | 339 |
| MIJARES, TITO A. | 42 | Percentage Points of the sum $V_1^{(s)}$ of s Roots ($s = 1 - 50$), A Unified Table for Tests of Significance in Various Univariate and Multivariate Hypotheses.... | 338 |
| STATISTICAL ENGINEERING LABORATORY | 9 | Table of Percentage Points of the χ^2 -Distribution..... | 153 |
| WEAST, ROBERT C., SELBY, SAMUEL M. & HODGMAN, CHARLES D., Editors | 107 | Handbook of Mathematical Tables..... | 680 |
| WINE, R. LOWELL | 43 | Statistics for Scientists and Engineers..... | 339 |
| L. Higher Mathematical Functions | | | |
| ABRAMOWITZ, MILTON & STEGRUN, IRENE A., Editors | 1 | Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables..... | 147 |
| ARSCOTT, F. M. | 126 | Periodic Differential Equations..... | 693 |
| ATOJI, M. & CLARK, F. L. | 124 | Tables of the Generalized Riemann Zeta Functions.... | 692 |
| ATOJI, M. & CLARK, F. L. | 125 | The Generalized Riemann Zeta Functions and their Applications in the Calculations of Neutron Cross Sections..... | 692 |
| BELYAKOV, V. M., KRA- VTSOVA, R. I. & RAPPO- PORT, M. G. | 127 | Tables of Elliptical Integrals..... | 694 |
| BURLINGTON, RICHARD S. | 72 | Handbook of Mathematical Tables and Formulas..... | 503 |
| CURTIS, A. R. | 10 | Tables of Jacobian Elliptic Functions whose Argu- ments are Rational Fractions of the Quarter Period.. | 154 |
| CURTIS, A. R. | 46 | Coulomb Wave Functions..... | 341 |
| DAVIS, HAROLD T. | 131 | Tables of the Mathematical Functions..... | 696 |
| DOUGHERTY, H. T. & JOHNSON, M. E. | 122 | A Tabulation of Airy Functions..... | 691 |
| EMERSLEBEN, OTTO | 130 | Die Strömungsbereiche bei zentrischer Überlagerung zweier Grundfunktionen doppelperiodischer Par- allelströmungen | 695 |
| FETTIS, HENRY E. & CASLIN, JAMES C. | 81 | Tables of Elliptic Integrals of the First, Second and Third Kind | 509 |
| FISHERKELLER, M. A. & CODY, W. J. | 47 | Tables of the Complete Elliptic Integrals K , K' , E , and E' | 342 |
| HARVEY, ATHENA | 14 | Tables of $\int_0^x e^{-bt} I_0(t)$ | 155 |
| HEATLEY, A. H. | 48 | Tables of the Confluent Hypergeometric Function and the Toronto Function | 343 |
| JOHNSTON, J. R. | 49 | Tables of Values and Zeros of the Confluent Hyper- geometric Function | 343 |
| KARPOV, K. A. | 128 | Tables of the Function $w(z) = e^{-z^2} \int_0^z e^{x^2} dx$ in the Com- plex Domain | 694 |
| LING, CHIH-BING | 11 | Tables of Values of σ_{2z} Relating to Weierstrass' Elliptic Function | 155 |
| LUKE, SIU-KAY & WEISS- MAN, STANLEY | 50 | Bessel Functions of Imaginary Order and Imaginary Argument | 343 |

| <i>Author</i> | <i>Review</i> | <i>Title</i> | <i>Page</i> |
|--|---------------|---|-------------|
| MANKOPF, JÜRGEN RICHARD | 82 | Über die periodischen Lösungen der Van der Pol'schen Differentialgleichung $\ddot{x} + \mu(x^2 - 1)\dot{x} + x = 0$ | 509 |
| MITRINović, D. S. & DJOKOVić, D. Ž. | 108 | Specijalne Funkcije (Special Functions); Zbornik Matematičkih Problema (Collection of Mathematical Problems) | 681 |
| NA, T. Y. & HANSEN, A. G. | 12 | Tabulation of the Hermite Function with Imaginary Arguments $H_n(ix)$ | 155 |
| SKOBLiA, N. | 15 | Tables for the Numerical Inversion of Laplace Transforms | 156 |
| SMIRNOV, N. V., Editor | 129 | Tables of the Normal Probability Integral, the Normal Density, and its Normalized Derivatives | 694 |
| SPIRA, ROBERT | 13 | Calculation of the Riemann Zeta Function | 155 |
| SPIRA, ROBERT | 80 | Coefficients for the Riemann-Siegel Formula | 508 |
| STUCKEY, M. M. & LAYTON, L. L. | 51 | Numerical Determination of Spheroidal Wave Function Eigenvalues and Expansion Coefficients | 344 |
| WEAST, ROBERT C., SELBY, SAMUEL M., & HODGMAN, CHARLES D., Editors | 107 | Handbook of Mathematical Tables | 680 |
| YOUNG, ANDREW & KIRK, ALAN | 52 | Bessel Functions, Part IV: Kelvin Functions | 344 |
| ZHURINA, M. I. & KARMA- ZINA, L. N. | 123 | Tables of the Legendre Functions, Part 2 | 692 |

M. Integrals

| | | | |
|---|-----|--|-----|
| ABRAMOWITZ, MILTON & STEGRUN, IRENE A., Editors | 1 | Handbook of Mathematical Functions, with Formulas, Graphs and Mathematical Tables | 147 |
| ALBASINY, E. L., BELL, R. J. & COOPER, J. R. A. | 16 | A Table for the Evaluation of Slater Coefficients and Integrals of Triple Products of Spherical Harmonics | 157 |
| ARSCOTT, F. M. | 126 | Periodic Differential Equations | 693 |
| BELYAKOV, V. M., KRAVTSOVA, R. I. & RAPPOPORT, M. G. | 127 | Tables of Elliptical Integrals | 694 |
| BURLINGTON, RICHARD S. | 72 | Handbook of Mathematical Tables and Formulas | 503 |
| FETTIS, HENRY E. & CASLIN, JAMES C. | 81 | Tables of Elliptic Integrals of the First, Second and Third Kind | 509 |
| HARVEY, ATHENA | 14 | Tables of $\int_0^\infty e^{-bt} I_0(t) dt$ | 155 |
| KARPOV, K. A. | 128 | Tables of the Function $w(z) = e^{-z^2} \int_0^z e^{-x^2} dx$ in the Complex Domain | 694 |
| KRUGLIKOVÁ, L. | 17 | Tables for Numerical Fourier Transformations | 158 |
| MORRIS, MAX & BROWN, ORLEY E. | 132 | Differential Equations | 698 |
| SANSONE, G. & CONTI, R. | 133 | Non-linear Differential Equations | 699 |
| SKOBLiA, N. | 15 | Tables for the Numerical Inversion of Laplace Transforms | 156 |
| SMIRNOV, N. V. Editor | 129 | Tables of the Normal Probability Integral, the Normal Density, and its Normalized Derivatives | 694 |
| WALTERS, L. C. & WAIT, J. R. | 83 | Computation of a Modified Fresnel Integral Arising in the Theory of Diffraction by a Variable Screen | 510 |
| WEAST, ROBERT C., SELBY, SAMUEL M. & HODGMAN, CHARLES D., Editors | 107 | Handbook of Mathematical Tables | 680 |
| YOUNG, ANDREW & KIRK, ALAN | 52 | Bessel Functions, Part IV: Kelvin Functions | 344 |

| <i>Author</i> | <i>Review</i> | <i>Title</i> | <i>Page</i> |
|--|---------------|--|-------------|
| N. Interest and Investment | | | |
| BURLINGTON, RICHARD S. | 72 | <i>Handbook of Mathematical Tables and Formulas</i> | 503 |
| WEAST, ROBERT C., SELBY, SAMUEL M. & HODGMAN, CHARLES D., Editors | 107 | <i>Handbook of Mathematical Tables</i> | 680 |
| O. Actuarial Science | | | |
| BURLINGTON, RICHARD S. | 72 | <i>Handbook of Mathematical Tables and Formulas</i> | 503 |
| P. Engineering | | | |
| BURLINGTON, RICHARD S. | 72 | <i>Handbook of Mathematical Tables and Formulas</i> | 503 |
| HANSEN, ARTHUR G. | 84 | <i>Similarity Analyses of Boundary Value Problems in Engineering</i> | 511 |
| JAMES M. L., SMITH, G. M. & WOLFORD, J. C. | 85 | <i>Analog and Digital Computer Methods in Engineering Analysis</i> | 511 |
| LEVINE, LEON | 44 | <i>Methods for Solving Engineering Problems Using Analog Computers</i> | 339 |
| PESCHON, JOHN, Editor | 86 | <i>Disciplines and Techniques of Systems Control</i> | 512 |
| PONTRYAGIN, L. S., BOLTYANSKII, V. G., GAMKRELIDZE, R. V. & MISHCHENKO, E. F. | 18 | <i>The Mathematical Theory of Optimal Processes</i> | 159 |
| TSYPKIN, YA. Z. | 19 | <i>Sampling Systems Theory and its Application</i> | 161 |
| WOLFOWITZ, J. | 87 | <i>Coding Theorems of Information Theory</i> | 512 |
| Q. Astronomy | | | |
| TAUB, A. H., General Editor | 53 | <i>John von Neumann, Collected Works, Volume VI</i> | 346 |
| WEAST, ROBERT C., SELBY, SAMUEL M. & HODGMAN, CHARLES D., Editors | 107 | <i>Handbook of Mathematical Tables</i> | 680 |
| R. Geodesy | | | |
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
| S. Physics, Geophysics, Crystallography | | | |
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables</i> | 147 |
| ATOJI, M. & CLARK, F. L. | 125 | <i>The Generalized Riemann Zeta Functions and their Applications in the Calculations of Neutron Cross Sections</i> | 692 |
| BAKHVALOV, N. C., ET AL. | 88 | <i>Chislennye metody resheniya differentsial'nykh i inte- gral'nykh uravnenii i kradraturnye formuly (Numeri- cal Methods for the Solution of Differential and Inte- gral Equations and Quadrature Formulas)</i> | 513 |
| BURLINGTON, RICHARD S. | 72 | <i>Handbook of Mathematical Tables and Formulas</i> | 503 |
| HAHN, DIETRICH, ET AL. | 54 | <i>Seven-Place Tables of the Planck Function for the Visible Spectrum</i> | 346 |
| WALTERS, L. C. & WAIT, J. R. | 83 | <i>Computation of a Modified Fresnel Integral Arising in the Theory of Diffraction by a Variable Screen</i> | 510 |

| <i>Author</i> | <i>Review</i> | <i>Title</i> | <i>Page</i> |
|--|---------------|--|-------------|
| V. Aerodynamics, Hydrodynamics, Ballistics | | | |
| CLAASSEN, R. W. & THORNE, C. J. | 21 | <i>Steady-State Motion of Cables in Fluids, Part 2, Tables of Cable Functions for Vertical Plane Motion</i> | 163 |
| EMERSLEBEN, OTTO | 130 | <i>Die Stromungsbereiche bei zentrischer Überlagerung zweier Grundfunktionen doppelperiodischer Par- allelströmungen</i> | 695 |
| KIBEL', I. A. | 20 | <i>An Introduction to the Hydrodynamical Methods of Short Period Weather Forecasting</i> | 162 |
| TAUB, A. H., General Editor | 53 | <i>John von Neumann, Collected Works, Volume VI</i> | 346 |
| W. Economics and Social Sciences | | | |
| GASS, SAUL I. | 55 | <i>Linear Programming, Methods and Applications</i> | 347 |
| X. Numerical Analysis and Applied Mathematics | | | |
| ABRAMOWITZ, MILTON & STEGUN, IRENE A., Editors | 1 | <i>Handbook of Mathematical Functions with Formulas, Graphs, and Mathematic l ables</i> | 147 |
| ALBASINY, E. L., BELL, R. J. & COOPER, J. R. A. | 16 | <i>A Table for the Evaluation of Slater Coefficients and Integrals of Triple Products of Spherical Harmonics</i> 157 | |
| BAKHVALOV, N. C., ET AL. | 88 | <i>Chislennye metody resheniya differentsial'nykh i inte- gral'nykh uravnenii i kradraturnye formuly (Numeri- cal Methods for the Solution of Differential and Integral Equations and Quadrature Formulas)</i> | 513 |
| BALAKRISHNAN, A. V. & NEUSTADT, LUCIEN W., Editors | 99 | <i>Computing Methods in Optimization Problems</i> | 520 |
| BECKENBACH, EDWIN F., Editor | 89 | <i>Applied Combinatorial Mathematics</i> | 513 |
| BELLMAN, RICHARD & KALABA, ROBERT, Editors | 90 | <i>Selected Papers on Mathematical Trends in Control Theory</i> | 514 |
| BOWMAN, HOWARD S. | 100 | <i>A Nomogram for Computing $(a + jb)/(c + jd)$ and a Nomogram for Computing $(a + jb) / (c + jd)$</i> | 522 |
| BUTCHER, J. C. | 56 | <i>Tables of Coefficients for Implicit Runge-Kutta Pro- cesses</i> | 348 |
| CLAASSEN, R. W. & THORNE, C. J. | 21 | <i>Steady-State Motion of Cables in Fluids, Part 2, Tables of Cable Functions for Vertical Plane Motion</i> | 163 |
| COLBERT, HARRY M. | 91 | <i>Asymptotic Expansion for the Characteristic Values of Mathieu's Equation</i> | 515 |
| DAVIS, HAROLD T. | 131 | <i>Tables of the Mathematical Functions</i> | 695 |
| DODES, IRVING ALLEN & GREITZER, SAMUEL L. | 57 | <i>Numerical Analysis</i> | 348 |
| EL'SGOL'C, L. È. | 58 | <i>Qualitative Methods in Mathematical Analysis</i> | 349 |
| FANO, ROBERT M. | 79 | <i>Transmission of Information, A Statistical Theory of Communications</i> | 507 |
| FEJES TÓTH, L. | 24 | <i>Regular Figures</i> | 166 |
| FOX, L. | 40 | <i>An Introduction to Numerical Linear Algebra</i> | 337 |
| FOX, L. | 117 | <i>An Introduction to Numerical Linear Algebra</i> | 688 |
| GAIER, DIETER | 134 | <i>Konstruktive Methoden der konformen Abbildung</i> | 699 |
| GASS, SAUL I. | 55 | <i>Linear Programming, Methods and Applications</i> | 347 |
| HAMMERSLEY, J. M. & HANDSCOMB, D. C. | 45 | <i>Monte Carlo Methods</i> | 340 |

| Author | Review | Title | Page |
|---|--------|---|------|
| HANSEN, ARTHUR G. | 84 | <i>Similarity Analyses of Boundary Value Problems in Engineering</i> | 511 |
| HENRICI, PETER | 6 | <i>Error Propagation for Difference Methods</i> | 152 |
| HENRICI, PETER | 92 | <i>Elements of Numerical Analysis</i> | 516 |
| ISAACS, RUFUS | 135 | <i>Differential Games</i> | 700 |
| JAMES, M. L., SMITH, G. M. & WOLFORD, J. C. | 85 | <i>Analog and Digital Computer Methods in Engineering Analysis</i> | 511 |
| KOVACH, LADIS D. | 137 | <i>Computer-Oriented Mathematics</i> | 702 |
| KRUGLIKOVÁ, L. | 17 | <i>Tables for Numerical Fourier Transformations</i> | 158 |
| MARCUS, MARVIN & MINC, HENRYK | 3 | <i>A Survey of Matrix Theory and Matrix Inequalities</i> | 150 |
| MCCORMICK, JOHN M. & SALVADORI, MARIO G. | 101 | <i>Numerical Methods in FORTRAN</i> | 523 |
| MEINARDUS, GÜNTHER | 93 | <i>Approximation von Funktionen und ihre numerische Behandlung</i> | 517 |
| METROPOLIS, N., ET AL. | 61 | <i>Experimental Arithmetic, High Speed Computing and Mathematics</i> | 350 |
| MITRINović, D. S. | 94 | <i>Elementary Inequalities</i> | 517 |
| NEWMAN, JAMES R. | 22 | <i>The Universal Encyclopedia of Mathematics</i> | 164 |
| NIELSEN, KAJ L. | 23 | <i>Methods in Numerical Analysis</i> | 165 |
| NOBLE, BEN | 136 | <i>Numerical Methods, Volume 1, Iteration, Programming and Algebraic Equations; Volume 2, Differences, Integration and Differential Equations</i> | 701 |
| PESCHL, ERNST & BAUER, KARL WILHELM | 59 | <i>Über eine nichtlineare Differentialgleichung 2. Ordnung, die bei einem gewissen Abschätzungverfahren eine besondere Rolle spielt</i> | 349 |
| PONTRYAGIN, L. S., BOLTYANSKII, V. G., GAMKRELIDZE, R. V. & MISCHENKO, E. F. | 18 | <i>The Mathematical Theory of Optimal Processes</i> | 159 |
| PRAGER, WILLIAM | 138 | <i>Introduction to Basic FORTRAN Programming and Numerical Methods</i> | 702 |
| RICE, JOHN R. | 95 | <i>The Approximation of Functions, Volume 1: Linear Theory</i> | 518 |
| SCHNEIDER, HANS, Editor | 77 | <i>Recent Advances in Matrix Theory</i> | 506 |
| SCHRÖDER, GERHARD | 78 | <i>Über die Konvergenz einiger Jacobi-Verfahren zur Bestimmung der Eigenwerte symmetrischer Matrizen</i> | 507 |
| SINGER, JAMES | 96 | <i>Elements of Numerical Analysis</i> | 518 |
| TAUB, A. H., General Editor | 53 | <i>John von Neumann, Collected Works, Volume VI</i> | 346 |
| TRAUB, J. F. | 4 | <i>Iterative Methods for the Solution of Equations</i> | 151 |
| TSYPLKIN, YA. Z. | 19 | <i>Sampling Systems Theory and Its Application</i> | 161 |
| VILENKN, N. YA. | 97 | <i>Successive Approximation</i> | 519 |
| WILCOX, CALVIN H., Editor | 98 | <i>Asymptotic Solutions of Differential Equations and Their Applications</i> | 520 |
| ZUBOV, V. I. | 60 | <i>Methods of A. M. Lyapunov and Their Application</i> | 349 |
| ZURMÜHL, R. | 41 | <i>Matrizen und ihre technischen Anwendungen</i> | 338 |

Z. Calculating Machines and Mechanical Computation

| | | | |
|---|-----|--|-----|
| ALT, FRANZ L. & RUBINOFF, MORRIS, Editors | 62 | <i>Advances in Computers, Vol. 3</i> | 351 |
| ALT, FRANZ L. & | 102 | <i>Advances in Computers, Vol. 5</i> | 523 |

| <i>Author</i> | <i>Review</i> | <i>Title</i> | <i>Page</i> |
|---|---------------|--|-------------|
| RUBINOFF, MORRIS, Editors | | | |
| ANDERSEN, C. | 63 | <i>An Introduction to ALGOL 60</i> | 352 |
| BALAKRISHNAN, A. V. & NEUSTADT, LUCIEN W., Editors | 99 | <i>Computing Methods in Optimization Problems</i> | 520 |
| BAUMANN, R., FELICIANO, M., BAUER, F. L. & SAMELSON, K. | 25 | <i>Introduction to ALGOL</i> | 166 |
| BÖHLING, KARL-HEINZ | 64 | <i>Zur Strukturtheorie sequentieller Automaten</i> | 353 |
| BOLLIER, L., GASTINEL, N. & LAURENT, P. J. | 26 | <i>ALGOL</i> | 168 |
| BOWMAN, HOWARD S. | 100 | <i>A Nomogram for Computing $(a + jb)/(c + jd)$ and a Nomogram for Computing $a + jb / c + jd$</i> .. | 522 |
| BURNETT-HALL, D. G., DRESEL, L. A. G. & SAMET, P. A. | 27 | <i>Computer Programming and Autocodes</i> | 168 |
| CUTLER, DONALD I. | 103 | <i>Introduction to Computer Programming</i> | 524 |
| DODES, IRVING ALLEN | 28 | <i>IBM 1620 Programming for Science and Mathematics</i> | 169 |
| DUBISCH, ROY | 65 | <i>Lattices to Logic</i> | 353 |
| FROESE, CHARLOTTE | 104 | <i>Introduction to Programming the IBM 1620</i> | 525 |
| GASS, SAUL I. | 55 | <i>Linear Programming, Methods and Applications</i> | 347 |
| GINSBURG, SEYMOUR | 29 | <i>An Introduction to Mathematical Machine Theory</i> | 169 |
| GUTENMAKHER, L. I. | 66 | <i>Electronic Information—Logic Machines</i> | 354 |
| HARRIS, THEODORE E. | 67 | <i>The Theory of Branching Processes</i> | 355 |
| HUSKEY, H. D. & KORN, G. A., Editors | 68 | <i>Computer Handbook</i> | 355 |
| JAMES, M. L., SMITH, G. M. & WOLFORD, J. C. | 85 | <i>Analog and Digital Computer Methods in Engineering Analysis</i> | 511 |
| KOVACH, LADIS D. | 137 | <i>Computer-Oriented Mathematics</i> | 702 |
| LEVINE, LEON | 44 | <i>Methods for Solving Engineering Problems Using Analog Computers</i> | 339 |
| MALEY, GERALD A. & SKIKO, EDWARD J. | 105 | <i>Modern Digital Computers</i> | 525 |
| MANKOPF, JÜRGEN RICHARD | 82 | <i>Über die periodischen Lösungen der Van der Polschen Differentialgleichung $\ddot{x} + \mu(x^2 - 1)\dot{x} + x = 0$</i> | 509 |
| McCORMICK, JOHN M. & SALVADORI, MARIO G. | 101 | <i>Numerical Methods in FORTRAN</i> | 523 |
| METROPOLIS, N., ET AL. | 61 | <i>Experimental Arithmetic, High Speed Computing and Mathematics</i> | 350 |
| MOORE, EDWARD F., Editor | 30 | <i>Sequential Machines: Selected Papers</i> | 171 |
| NEWELL, ALLEN, ET AL. | 69 | <i>Information Processing Language-V Manual</i> | 356 |
| NICKEL, KARL | 70 | <i>ALGOL Praktikum. Eine Einführung in das Pro- grammieren</i> | 358 |
| PESCHON, JOHN, Editor | 86 | <i>Disciplines and Techniques of Systems Control</i> | 512 |
| PRAGER, WILLIAM | 138 | <i>Introduction to Basic FORTRAN Programming and Numerical Methods</i> | 702 |
| RAISBECK, GORDON | 71 | <i>Information Theory, an Introduction for Scientists and Engineers</i> | 359 |
| SCHULTZ, LOUISE | 31 | <i>Digital Processing: A System Orientation</i> | 171 |
| SHERMAN, PHILIP M..... | 32 | <i>Programming and Coding the IBM 709-7090-7094 Computers</i> | 172 |
| STEIN, MARVIN L. & | 33 | <i>Computer Programming: A Mixed Language Approach</i> | 172 |

| <i>Author</i> | <i>Review</i> | <i>Title</i> | <i>Page</i> |
|-----------------------|---------------|---|-------------|
| MUNRO, WILLIAM D. | | | |
| TROLLHANN, LILIAN & | 139 | <i>Dictionary of Data Processing</i> | 703 |
| WITTMANN, ALFRED | | | |
| WEGNER, PETER, Editor | 106 | <i>Introduction to System Programming</i> | 526 |
| WOLFOWITZ, J. | 87 | <i>Coding Theorems of Information Theory</i> | 512 |
| WOOLDRIDGE, R. & | 34 | <i>An Introduction to ALGOL Programming</i> | 173 |
| RATCLIFFE, J. F. | | | |
| YOUTDEN, W. W. | 140 | <i>Computer Literature Bibliography 1946-1963</i> | 704 |
| | | <i>Compiled by</i> | |
| | | HELEN P. SMITH | |

Applied Mathematics Laboratory
David Taylor Model Basin
Washington, D. C.

Mathematics of Computation

*A Quarterly Journal
Edited by*

HARRY POLACHEK, Chairman

| | | |
|-------------------|---------------|-----------------|
| PHILIP J. DAVIS | ALAN FLETCHER | ALAN J. HOFFMAN |
| A. S. HOUSEHOLDER | PETER D. LAX | Y. L. LUKE |
| PHILIP M. MORSE | DANIEL SHANKS | R. S. VARGA |
| J. W. WRENCH, JR. | | |

XIX

NOS. 89-92

1965