Mathematics of Computation

Beginning with Volume 16, Number 7, January 1962, The American Mathematical Society will publish the journal

MATHEMATICS OF COMPUTATION for the National Academy of Sciences-National Research Council.

TABLE OF CONTENTS

January 1962
Correlations and Spectra for Non-Stationary Random Functions Kampé de Fériet and François N. Frenkiel
On Numerical Integration of Ordinary Differential Equations ARNOLD NORDSIECK
Triple Product Integrals of Laguerre Functions. J. Gillis and M. Shimshoni
The Behavior of Pseudo-Random Sequences Generated on Computers by the Multiplicative Congruential Method V. D. BARNETT
A Note of the Convergence of Alternating Direction Methods . MILTON LEES
Calculation of π to 100,000 Decimals Daniel Shanks and John W. Wrench, Jr.
TECHNICAL NOTES AND SHORT PAPERS
Characteristic Exponents of Mathieu Functions T. Tamer
An Algorithm for Solving Certain Polynomial Equations with Coefficient Parameters
A Remark Concerning the Solution of the Dirichlet Problem by Finite Differences
Reviews and Descriptions of Tables and Books Lieberman & Owen 1, Stanton 2, Shimpuku 3, National Physical Laboratory 4, Rosenthal & Rodden 5, Solodovnikov 6, Bendaniel & Carr 7, Frevel & Turley 8, Sagan 9, Coleman, Bozman & Meggers 10, Orcutt, Greenberger, Korbel & Rivlin 11, Dresher 12, Layton, Smith & Chatfield 13, Kammerer 14, Leeds & Weinberg 15, Peterson 16, Ungar 17
The journal is published quarterly in one volume per year. Subscription per year \$8.00 Single copies \$2.50

Send Orders to

AMERICAN MATHEMATICAL SOCIETY

190 Hope Street, Providence 6, Rhode Island

CONTENTS

Vol. 6, No. 2 June, 1962

Page
A decomposition theorem for supermartingalesBy P. A. Meyer 193
Periodic homeomorphisms of the 3-sphere By Edwin Moise 206
Rises and upcrossings of nonnegative martingales By Lester E. Dubins 226
The radius of univalence of certain entire functions By Herbert S. Wilf 242
Symmetric homology spheres By Barry Mazur 245
Diophantine problems involving powers modulo one By Edward C. Posner 251
Differential forms and Lie algebra cohomology for algebraic linear groups By G. Hochschild and B. Kostant 264
Existence of normal complements and extension of characters in finite groups
Conformal transformations of compact Riemannian manifolds By Morio Obata 292
Convergence of quantifiers and martingales By Fred B. Wright 296
The dimension of the set of zeros and the graph of a symmetric stable process
On universal transformation groups By Hsin Chu 317
Point realizations of transformation groups By George W. Mackey 327
On the homotopy-commutativity of suspensions By I. Berstein and T. Ganea 336
On a class of doubly transitive permutation groupsBy Noboru Ito 341
Uniqueness of invariant Wedderburn factors By E. J. Taft 353
Feller and Martin boundaries for countable sets By Jacob Feldman 356

Published by the University of Illinois Press in March, June, September and December. Supported in part by the George A. Miller Endowment. Printed by Waverly Press, Baltimore, Maryland.

The subscription price is \$9.00 a volume (four numbers); this is reduced to \$5.00 for individual members of the American Mathematical Society. The price of a single number is \$3.00. Subscriptions should be sent to the University of Illinois Press, Urbana, Illinois.