Volume 38, 1991, Issue No. 2

The Michigan Mathematical Journal

EDITOR
Douglas G. Dickson

ASSOCIATE EDITORS
Morton Brown
Daniel M. Burns, Jr.
F. W. Gehring
Melvin Hochster
David Masser
M. S. Ramanujan
Peter Scott
Michael I. Weinstein

ASSISTANT EDITOR
Mary L. Thompson

BUSINESS MANAGER
Robert W. Puster

DEPARTMENT OF MATHEMATICS
THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN, U.S.A.

ISSN 0026-2285

The Michigan Mathematical Journal is published by the Department of Mathematics at the University of Michigan and endeavors to publish significant research articles in all areas of mathematics. One volume is published each year, and each volume consists of three issues. The subscription price is $50 per volume (postage included); single issues may be purchased for $17. Subscriptions intended for the private use of individuals are available at the reduced rate of $25 per volume.

Subscription orders should be sent to the Business Manager, Michigan Mathematical Journal, Department of Mathematics, University of Michigan, Ann Arbor, Michigan, 48109. All subscriptions must be prepaid in U.S. funds. The Journal will accept payment for subscriptions one, two, or three years in advance. Checks and money orders should be made payable to the Michigan Mathematical Journal.

Volumes 12 through 23 (1965–1976) consist of four issues per volume; earlier volumes vary in size from one to three issues. Volumes 12 through 37 may be purchased from the publisher at the price of $50 per volume. Volumes 1 through 9 are no longer available from the University of Michigan; they may be purchased from the Johnson Reprint Corporation, 111 Fifth Avenue, New York, N.Y., 10003. Volumes 10 and 11 are not available.

To submit a paper for publication, an author should send two copies of the manuscript to the Editor, Michigan Mathematical Journal, University of Michigan, Ann Arbor, Michigan, 48109. The submission of a paper implies the author's assurance that it has not been copyrighted, published, or submitted for publication elsewhere. Preference will be given to manuscripts between ten and forty pages in length. All authors of papers accepted for publication will be required to sign a transfer of copyright agreement.

To help defray the cost of publication of the journal, page charges of $25 per printed page will be billed to the author's institution. If the institution is unable to pay any charges, the author will be asked to pay a nominal fee for 100 offprints; joint authors will share the 100 offprints.

Authors should strive for expository clarity and good literary style. Manuscripts lacking in these respects will not be published. Manuscripts submitted for publication should be neatly typed on one side of the page only, double spaced (including references), with generous margins. Diagrams should be drawn with black India ink on separate sheets of glossy white paper and be suitable for photographic reproduction. Hand inserted symbols should be well-spaced and legible; unusual symbols and complicated combinations of symbols should be avoided. Acknowledgments of grant support should be placed after the references, which should be in alphabetical–chronological order. References to articles and books should be written in the standard form with the standard abbreviations established by the Mathematical Reviews.

Copyright © the Regents of The University of Michigan,
A Michigan Constitutional Corporation, 1991

Contents

PAGE

A New Proof of the Bott–Samelson Theorem
Jyh-Yang Wu 163

Holomorphic Extension of Proper Meromorphic Mappings
Stephen A. Chiappari 167

Boundary Density and the Green Function
Jang-Mei Wu 175

Remarks Concerning Cyclic Spaces in Hardy and Bergman Spaces
John Akeroyd, Dmitry Khavinson, & Harold S. Shapiro 191

Landau and Schottky Theorems for Holomorphic Curves
Peter Hall 207

Multipliers of de Branges Spaces
B. Mark Davis & John E. McCarthy 225

On Consecutive kth Power Residues, II
Adolf Hildebrand 241

Minimal Hypersurfaces Foliated by Spheres
William C. Jagy 255

Compact Symplectic Manifolds with Free Circle Actions, and Massey Products
Marisa Fernández, Alfred Gray, & John W. Morgan 271

Rigidity Theorems for Foliations by Surfaces and Spin Manifolds
James L. Heitsch & Connor Lazarov 285

A Functional Calculus for a Scalar Perturbation of $\partial/\partial z$
Maxim J. Goldberg 299