

JOURNALS PUBLISHED BY THE AMERICAN MATHEMATICAL SOCIETY

TRANSLATION JOURNALS

Soviet Mathematics–Doklady is a bimonthly translation journal containing the entire pure mathematics section of the DOKLADY AKADEMII NAUK SSSR.

Mathematics of the USSR–Izvestija, a bimonthly journal is a cover-to-cover translation of IZVESTIJA AKADEMII NAUK SSSR SERIJA MATEMATIČESKAJA.

Mathematics of the USSR–Sbornik is a monthly journal and is a cover-to-cover translation of MATEMATIČSKII SBORNIK (NOVAJA SERIJA).

Theory of Probability and Mathematical Statistics is the cover-to-cover translation into English of the TEORIJA VEROJATNOSTEI I MATEMATIČESKAJA STATISTIKA.

Vestnik of the Leningrad University (Mathematics) is the complete translation into English of the mathematics section of the VESTNIK LENINGRADSKOGO UNIVERSITETA.

Transactions of the Moscow Mathematical Society is a translation into English of TRUDY MOSKOVSKOGO MATEMATIČESKOGO OBSČESTVA.

Proceedings of the Steklov Institute of Mathematics is a translation of the PROCEEDINGS OF THE STEKLOV INSTITUTE OF MATHEMATICS IN THE ACADEMY OF SCIENCES OF THE USSR.

RESEARCH JOURNALS

Submission information for these journals is included in the May and September issues of this *Bulletin*.

Bulletin (New Series) of the American Mathematical Society is a bimonthly journal which contains Research-Expository Papers, Research Announcements and Reviews of Books on Advanced Mathematics.

Mathematics of Computation is a quarterly journal devoted to original papers in numerical analysis, the application of numerical methods and high-speed calculator devices, the computation of mathematical tables, the theory of high-speed calculating devices, and other aids to computation.

Memoirs of the American Mathematical Society is a bimonthly journal constituting a series of paperbound research tracts which are of the same general character as the papers published in the TRANSACTIONS.

Proceedings of the American Mathematical Society is a monthly journal devoted entirely to research in pure and applied mathematics, principally to the publication of original papers of moderate length. A department called Shorter Notes was established for the purpose of publishing very short papers of an unusually elegant and polished character for which there is normally no other outlet.

Transactions of the American Mathematical Society is a monthly journal devoted entirely to research in pure and applied mathematics and, in general, includes longer papers than those in the PROCEEDINGS.

OTHER JOURNALS

Abstracts of Papers Presented to the American Mathematical Society contains abstracts of invited hour addresses of papers presented in special sessions or in sessions for contributed papers and of papers presented to the Society "by title".

Current Mathematical Publications, issued biweekly, contains a subject-classified index of papers and books being published currently in mathematics.

Mathematical Reviews is a monthly journal devoted to abstracts and reviews of the current mathematical literature of the world. Each volume consists of six regular issues plus an index issue. Starting in 1979 the second volume index each year is the author and subject index for the entire year. Abstracts and reviews are grouped under subject headings.

Notices of the American Mathematical Society, published eight times a year, contains programs and reports of the meetings of the Society, reports on Society business, communications to the membership, and news items and information of interest to the mathematical community.

BULLETIN (New Series) of the American Mathematical Society

EDITORS

EDITORIAL BOARD FOR RESEARCH-EXPOSITORY ARTICLES

Hyman Bass	Irving Kaplansky
Felix E. Browder	Peter D. Lax
Chairman	John W. Milnor
S. S. Chern	Hugh L. Montgomery
Fredrick W. Gehring	Gian-Carlo Rota

EDITORIAL BOARD FOR RESEARCH ANNOUNCEMENTS

Spencer Bloch	Henry P. McKean, Jr.
Charles L. Fefferman	Richard Melrose
Ronald L. Graham	Calvin C. Moore
Melvin Hochster	Chairman
Robert P. Langlands	Yiannis Moschovakis
Richard K. Lashof	I. M. Singer
Harold M. Stark	

BOOK REVIEW EDITOR:	Meyer Jerison
MANAGING EDITOR:	Calvin C. Moore

MANUSCRIPT, PROOF AND COPYING INFORMATION

SUBMISSION OF MANUSCRIPT

Articles submitted for publication should be typewritten and double spaced. The *Manual for Authors*, available from the Society, should be consulted for symbols and style conventions. Authors should take the greatest possible care in preparing the original manuscript. Hand drawn symbols are satisfactory, if clearly done; directions to the printer should be included where necessary on a separate sheet.

For Research-Expository Articles and Research Announcements, the first footnote should include *subject classification numbers* representing the primary and secondary subjects of the article. The 1980 Mathematics Subject Classification can be found in the December index volumes of *Mathematical Reviews*.

COPYRIGHT TRANSFER AGREEMENT

The signing of a Copyright Transfer Agreement is a requirement of publication in the BULLETIN. A copy of the agreement is sent to the authors upon receipt of a manuscript in the Providence Office of the Society; in case of joint authors, copies are sent to the author who is designated to receive galley proof. Authors are urged to return the form immediately to prevent delays in processing and publishing of the manuscript. The 1978 edition of the *Manual for Authors* has a description of Society policy concerning copyright and a copy of the agreement.

PUBLICATION CHARGES

Research Announcements carry a page charge of \$40.00 per page to help defray the cost of publication. This amount is charged to the institution or to a contract supporting the research reported in the published paper. The publication charge policy of the United States Federal Council for Science and Technology (FCST) is reported on page 112 of the February, 1975 issue of the NOTICES of the American Mathematical Society. In no case is the author personally responsible for paying the page charge, nor is acceptance of the author's paper for publication dependent upon payment of the page charge.

REPRINTS AND ADDRESS CHANGES

Any inquiries concerning a paper which has been accepted for publication, including information regarding reprints or changes of address for mailing proof, should be sent directly to the Editorial Department, American Mathematical Society, P.O. Box 6248, Providence, Rhode Island 02940.

GALLEY PROOF

When a paper with more than one author has been accepted for publication, only one set of galley proof will be sent. Joint authors should, therefore, indicate which of them should receive galley proof in the event that the manuscript is accepted for publication.

COPYING AND REPRINTING

Individual readers of this publication, and nonprofit libraries acting for them are permitted to make fair use of the material, such as to copy an article for use in teaching or research. Permission is granted to quote brief passages from this publication in reviews provided the customary acknowledgement of the source is given.

Republication, systematic copying, or multiple reproduction of any material in this publication (including abstracts) is permitted only under license from the American Mathematical Society. Requests for such permission should be addressed to the Executive Director, American Mathematical Society, Box 6248, Providence, Rhode Island 02940.

The appearance of the code on the first page of an article in this journal indicates the copyright owner's consent for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law, provided that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (For details write Copyright Clearance Center, Inc., 21 Congress Street, Salem, Massachusetts 01970.)

(Continued from back cover)

Convex sets and their applications by <i>Steven R. Lay</i> —Reviewed by <i>A. W. Roberts</i> and <i>D. E. Varberg</i>	387
Counterexamples in topological vector spaces by <i>S. M. Khaleelulla</i> —Reviewed by <i>Albert Wilansky</i>	389
Convexity theory and its applications in functional analysis by <i>L. Asimow</i> and <i>A.</i> <i>J. Ellis</i> —Reviewed by <i>Fred Shultz</i>	391
John Von Neumann and Norbert Wiener, from mathematics to the technologies of life and death by <i>Steve J. Heims</i> —Reviewed by <i>Marshall H. Stone</i>	395
Fixed point theory: An Introduction by <i>Vasile I. Istratescu</i> —Reviewed by <i>Mieczyslaw</i> <i>Altman</i>	399
Groups, trees and projective modules by <i>Warren Dicks</i> ; Trees by <i>Jean-Pierre Serre</i> —Reviewed by <i>Roger C. Alperin</i>	401
Erratum	406
Corrigendum to “Fixed point algebras” by <i>C. Smoryński</i>	407

RESEARCH — EXPOSITORY PAPERS

- Strictly pseudoconvex domains in C^n by Michael Beals, Charles Fefferman and Robert Grossman..... 125

RESEARCH ANNOUNCEMENTS

- Instantons, double wells and large deviations by Barry Simon..... 323
- \mathcal{Q} valued functions minimising Dirichlet's integral and the regularity of area minimising rectifiable currents up to codimension two by F. J. Almgren, Jr. 327
- A united-set formula by Ziv Ran..... 329
- Existence theorems for generalised Klein-Gordon equations by Ezzat S. Noussair and Charles A. Swanson..... 333
- Hook-Young diagrams, combinatorics and representations of Lie superalgebras by A. Berele and A. Regev..... 337
- On the zeros of Dirichlet series associated with certain cusp forms by James L. Hafner..... 340

BOOK REVIEWS

- Maximum principles and their applications by René Sperb —Reviewed by Catherine Bandle..... 343
- The structure of locally compact Abelian groups by David L. Armacost —Reviewed by Larry Corwin..... 346
- Between nilpotent and solvable by Michael Weinstein —Reviewed by Larry Dornhoff..... 348
- Coding the universe by A. Beller, R. B. Jensen and P. Welch —Reviewed by William J. Mitchell..... 350
- Random Fourier series with applications to harmonic analysis by Michael B. Marcus and Gilles Pisier —Reviewed by Daniel Rider..... 353
- The representation theory of the symmetric group by Gordon James and Adalbert Kerber —Reviewed by Jacob Towber..... 357
- The logic of quantum mechanics by Enrico G. Bertrametti and Gianni Cassinelli —Reviewed by Martin Schechter..... 363
- Representations of real reductive Lie groups by David A. Vogan, Jr. —Reviewed by T. A. Springer..... 365
- An introduction to homological algebra by Joseph J. Rotman —Reviewed by J. Lambek..... 371
- Schottky groups and Mumford curves by L. Gerritzen and M. van der Put —Reviewed by David Goss..... 375
- Functional integration and quantum physics by James Glimm and Arthur Jaffe —Reviewed by Edward Nelson..... 378
- Real elliptic curves by Norman L. Alling —Reviewed by Harvey Cohn..... 380
- Module categories of analytic groups by Andy R. Magid —Reviewed by J. E. Humphreys..... 385

(Continued on inside back cover)