# BULLETIN <br> of the 

# American Mathematical Society 

Edited by<br>GIAN-CARLO ROTA JOHN L. KELLEY HANS F. WEINBERGER

Published by the<br>American Mathematical Society<br>Providence, Rhode Island

# AMERICAN MATHEMATICAL SOCIETY 

Business Office: P.O. Box 6248, Providence, Rhode Island 02904<br>Gordon L. Walker, Executive Director<br>Lincoln K. Durst, Deputy Director<br>Officers

President: Saunders Mac Lane, Department of Mathematics, Eckhart Hall, University of Chicago, Chicago, Illinois 60637
Ex-President: Nathan Jacobson, Department of Mathematics, Yale University, New Haven, Connecticut 06520
Vice-Presidents: Richard D. Anderson, Department of Mathematics, Louisiana State University, Baton Rouge, Louisiana 70803; R. Creighton Buck, Department of Mathematics, University of Wisconsin, Madison, Wisconsin 53706; Edwin E. Moise, Department of Mathematics, City University of New York, Queen's College, Flushing, New York 11367
Secretary: Everett Pitcher, Department of Mathematics, Lehigh University, Bethlehem, Pennsylvania 18015
Associate Secretaries: Paul T. Bateman, Department of Mathematics, University of Illinois, Urbana, Illinois 61801; Walter H. Gottschalk, Department of Mathematics, Wesleyan University, Middletown, Connecticut 06457; Orville G. Harrold, Jr., Department of Mathematics, Florida State University, Tallahassee, Florida 32306; Kenneth A. Ross, Department of Mathematics, University of Oregon, Eugene, Oregon 97403
Treasurer: W. T. Martin, Department of Mathematics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139
Associate Treasurer: Murray H. Protter, Department of Mathematics, University of California, Berkeley, California 94720
Board of Trustees: Paul T. Bateman, Department of Mathematics, University of Illinois, Urbana, Illinois 61801; Ralph P. Boas, Department of Mathematics, Northwestern University, Evanston, Illinois 60201; Saunders Mac Lane (ex officio); W. T. Martin (ex officio); Richard S. Palais, Department of Mathematics, Brandeis University, Waltham, Massachusetts 02154; Calvin C. Moore, Department of Mathematics, University of California, Berkeley, California 94720; Murray H. Protter (ex officio); Abraham H. Taub, Department of Mathematics, University of California, Berkeley, California 94720
Council Members: See inside back cover.

## Chairmen of Editorial and Communication Committees

Bulletin Editorial Committee: Gian-Carlo Rota, Department of Mathematics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139
Proceedings Editorial Committee: Joseph J. Rotman, Department of Mathematics, University of Illinois, Urbana, Illinois 61801
Transactions and Memoirs Editorial Committee: Steve Armentrout, Department of Mathematics, Pennsylvania State University, University Park, Pennsylvania 16802
Mathematical Reviews Editorial Committee: Frederick W. Gehring, Department of Mathematics, University of Michigan, Ann Arbor, Michigan 48104
Colloquium Editorial Committee: Alberto P. Calderón, Department of Mathematics, University of Chicago, Chicago, Illinois 60637
Mathematical Surveys Editorial Committee: Edgar H. Brown, Jr., Department of Mathematics, Brandeis University, Waltham, Massachusetts 02154
Mathematics of Computation Editorial Committee: Eugene Isaacson, Courant Institute of Mathematical Sciences, New York University, 251 Mercer Street, New York, New York 10012
Committee to Monitor Problems in Communication: Alex Rosenberg, Department of Mathematics, White Hall, Cornell University, Ithaca, New York 14850
Representatives of the Society on the Board of Editors of the American Journal of Mathematics: Hyman Bass, Department of Mathematics, Columbia University, New York, New York 10027; I. M. Singer, Department of Mathematics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139
Executive Editor of Mathematical Reviews: Jacob Burlak, 1315 Hill Street, Ann Arbor, Michigan 48104
Editor of Translations Projects: Ben Silver, American Mathematical Society, P.O. Box 6248, Providence, Rhode Island 02904
For members whose annual professional income is below $\$ 15,000$, the dues are $\$ 24$; for those whose professional income is $\$ 15,000$ or more, the dues are $\$ 32$. Dues are payable to the American Mathematical Society, P.O. Box 6248, Providence, Rhode Island 02904.

The Bulletin of the American Mathematical Society is published bimonthly in January, March, May, July, September and November. Price per annual volume is \$14. Orders for subscriptions and back numbers, and inquiries in regard to nondelivery of current issues should be addressed to the American Mathematical Society, P.O. Box 6248, Providence, Rhode Island 02904.

Second-class postage paid at Providence, Rhode Island and additional mailing offices. Copyright (C) American Mathematical Society 1973

Printed in the United States of America

