

BULLETIN
OF THE
AMERICAN MATHEMATICAL SOCIETY

EDITED BY

W. T. MARTIN **G. B. PRICE**

WITH THE ASSISTANCE OF R. P. BOAS, JR.

VOLUME 61, NUMBER 5

SEPTEMBER, 1955

(Whole No. 638)

CONTENTS

Nonlinear Differential Equations. By EDMUND PINNEY.....	373
On the Characters of a Semisimple Lie Group. By HARISH- CHANDRA.....	389
Topology of Lie Groups and Characteristic Classes. By ARMAND BOREL.....	397
The June Meeting in Vancouver. By V. L. KLEE, JR.....	433
Book Reviews.....	445
Research Problems.....	465

PUBLISHED BY THE SOCIETY

MENASHA, WIS., AND PROVIDENCE, R.I.

AMERICAN MATHEMATICAL SOCIETY

General Office: 80 Waterman Street, Providence 6, R. I.

Executive Director: Dr. J. H. Curtiss.

Editorial Office, Mathematical Reviews: 80 Waterman Street, Providence 6, R. I.

Executive Editor: Dr. J. V. Wehausen.

Officers and Editors:

President: Professor R. L. Wilder, University of Michigan, Ann Arbor, Mich.

Ex President: Professor G. T. Whyburn, University of Virginia, Charlottesville, Va.

Secretary: Professor E. G. Begle, Yale University, New Haven 11, Conn.

Associate Secretaries:

Professor V. L. Klee, University of California, Los Angeles 24, Calif.

Professor J. H. Roberts, Duke University, Durham, N. C.

Professor R. D. Schafer, University of Connecticut, Storrs, Conn.

Professor J. W. T. Youngs, Indiana University, Bloomington, Ind.

Treasurer: Dean A. E. Meder, Jr., Rutgers University, New Brunswick, N. J.

Managing Editor of the Bulletin: Professor W. T. Martin, Massachusetts Institute of Technology, Cambridge 39, Mass.

Managing Editor of the Proceedings: Professor A. C. Schaeffer, University of Wisconsin, Madison 6, Wis.

Managing Editor of the Transactions and Memoirs: Professor L. V. Ahlfors, Harvard University, Cambridge 38, Mass.

Chairman, Mathematical Reviews Editorial Committee: Professor Einar Hille, Yale University, New Haven 11, Conn.

Chairman, Colloquium Editorial Committee: Professor Salomon Bochner, Princeton University, Princeton, N. J.

Chairman, Mathematical Surveys Editorial Committee: Professor Leo Zippin, Queens College, Flushing 67, N. Y.

Representatives of the Society on the Board of Editors of the American Journal of Mathematics:

Professor Reinhold Baer, University of Illinois, Urbana, Ill.

Professor André Weil, University of Chicago, Chicago 37, Ill.

Chairman, Committee on Printing and Publishing: Dean C. J. Rees, University of Delaware, Newark, Del.

The annual dues of members of the Society (see this BULLETIN, November, 1954, pp. 600-601) are payable to the Treasurer of the Society, A. E. Meder, Jr., 80 Waterman Street, Providence 6, R. I.

The BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY is published bimonthly, in January, March, May, July, September, and November. Price per annual volume is \$7.00. Subscriptions, orders for back numbers, and inquiries in regard to non-delivery of current numbers should be addressed to the American Mathematical Society, 450 Ahnapp Street, Menasha, Wis., or 80 Waterman Street, Providence 6, R. I.

Entered as second class matter April 24, 1926, at the post office at Menasha, Wis. under the act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in the act of February 28, 1925, embodied in paragraph 4, section 538, P.L. and R., authorized May 9, 1935.

Copyright, American Mathematical Society, 1955

Printed in the United States of America