## **OFFICIAL COMMUNICATIONS**

#### **MEETINGS OF THE SOCIETY**

### NEW YORK CITY, February 25-26, 1944.

Abstracts must have been in the hands of Associate Secretary T. R. Hollcroft, 531 West 116th St., New York, 27, N. Y., not later than January 28. By invitation of the Program Committee, Professor E. L. Post will give an address entitled *Recursively* enumerable sets of positive integers and their decision problems and there will be a symposium in which Professor H. W. Emmons will speak on Numerical methods of solving partial differential equations.

#### New York City, April 28–29, 1944.

Abstracts must be in the hands of Associate Secretary T. R. Hollcroft, 531 West 116th St., New York, 27, N. Y., not later than March 31. By invitation of the Program Committee, there will be an address by Professor André Weil entitled *Modern algebra* and the Riemann hypothesis, and an address by Professor E. R. Lorch entitled *The* structure of normed abelian rings.

#### CHICAGO, ILLINOIS, April 28–29, 1944.

Abstracts must be in the hands of Acting Associate Secretary J. W. T. Youngs, Purdue University, Lafayette, Ind., not later than March 31. By invitation of the Program Committee, there will be an address by Professor J. L. Synge entitled *The problem of Saint Venant for a cylinder with free sides* and an address by Professor I. S. Sokolnikoff entitled *Torsion and flexure of compound prisms*.

#### BERKELEY, CALIFORNIA, April 29, 1944.

Abstracts must be in the hands of Associate Secretary A. D. Michal, California Institute of Technology, Pasadena, 4, Calif., not later than April 1. By invitation of the Program Committee, there will be an address by Dr. D. H. Hyers entitled *Linear topological spaces* and an address by Professor R. M. Robinson entitled *Hadamard's three circles theorem*. There will be a symposium on applied mathematics at which Dr. C. C. Lin will speak on *Hydrodynamical stability*. Other symposium speakers will be announced later.

## WELLESLEY, MASSACHUSETTS, September, 1944.

## J. R. KLINE, Secretary of the Society

The initial fees and annual dues of members of the Society (see this BULLETIN, May, 1930, p. 322; and September, 1942, Part 2, pp. 89–90) are payable to the Treasurer of the Society, B. P. GILL, 531 West 116th St., New York, 27, N. Y.

Articles for insertion in the BULLETIN should be typewritten, double spaced, and the author should keep a complete copy. Papers in algebra and theory of numbers should be sent to SAUNDERS MACLANE, 474 Widener, Harvard University, Cambridge, 38, Mass.; in analysis to R. E. LANGER, North Hall, University of Wisconsin, Madison, 6, Wis.; in other fields to P. A. SMITH, Columbia University, New York, 27, N. Y. Reviews should be sent to VIRGIL SNYDER, 846 East Park Ave., North, Winter Park, Fla., and items for Notes to BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY. 531 West 116th St., New York, 27, N. Y. All other communications to the editors should be addressed to the Managing Editor, TOMLINSON FORT, Lehigh University, Bethlehem, Pa.

# CONTENTS

Vol. 50, No. 2 FEBRUARY, 1944 Whole No.	533
	Page
Two works on iteration and related questions. By J. HADAMARD	67
On the extension of differentiable functions. By HASSLER WHITNEY	76
The symmetric join of a complex. By C. E. CLARK	81
The probability that a determinant be congruent to $a \pmod{m}$ . By N. J. FINE and IVAN NIVEN	89
On the notion of the ring of quotients of a prime ideal. By CLAUDE CHEVALLEY	93
Union-preserving transformations of space. By Edward Kasner and John DeCicco	98
Remarks on transitivities of betweenness. By W. R. TRANSUE.	108
Continued fractions and bounded analytic functions. By H. S. WALL	110
On minimum circumscribed polygons. By C. H. DOWKER	120
On <i>r</i> -regular convergence. By P. A. WHITE	123
Topics in the theory of Abelian groups. I. Divisibility of homo- morphisms. By HASSLER WHITNEY	129
Modularity in Birkhoff lattices. By L. R. WILCOX	135