

OFFICIAL COMMUNICATIONS

MEETINGS OF THE SOCIETY

NEW YORK CITY, October 29, 1938.

Abstracts must be in the hands of Associate Secretary T. R. Hollcroft, 531 West 116th St., New York, N. Y., not later than October 1. By invitation of the Program Committee, Professor G. A. Hedlund will deliver an address the title of which has been changed to *The dynamics of geodesic flows*.

CLEVELAND, OHIO, November 25–26, 1938.

Abstracts must be in the hands of Associate Secretary W. L. Ayres, University of Michigan, Ann Arbor, Mich., not later than October 28; they will appear in the November issue of this Bulletin. By invitation of the Program Committee, Professor C. C. MacDuffee will give an address entitled *Modules in algebraic fields* and Professor V. G. Grove an address entitled *A tensor analysis for a V_k in a projective space S_n* .

LOS ANGELES, CALIFORNIA, November 26, 1938.

Abstracts must be in the hands of Associate Secretary T. M. Putnam, University of California, Berkeley, Calif., not later than October 29; they will appear in the November issue of the Bulletin.

ANNUAL MEETING: RICHMOND, VIRGINIA, December 27–28; WILLIAMSBURG, VIRGINIA, December 28–30, 1938.

Abstracts must be in the hands of Associate Secretary T. R. Hollcroft, 531 West 116th St., New York, N. Y., not later than November 22, 1938. Abstracts received not later than November 1 will appear in the November issue of the Bulletin. At this meeting, the following addresses will be given:

At Richmond: *Intuition, reason, and faith in science* by Dean G. D. Birkhoff, retiring President of the American Association for the Advancement of Science; *Seismology from the mathematical viewpoint* by Professor W. D. Cairns, retiring Chairman of Section A and Vice President of the A.A.A.S., at a joint session of Section A, Section E, the Society, and the Mathematical Association; *Fourier expansions of modular functions and theorems on partitions* by Professor H. A. Rademacher, by invitation of the Program Committee, at a joint session of Section A, the Society, and the Mathematical Association.

At Williamsburg: *On certain abstract spaces* by Professor R. L. Moore, retiring President of the Society.

NEW YORK CITY, February 25, 1939.

Abstracts must be in the hands of Associate Secretary T. R. Hollcroft, 531 West 116th St., New York, N. Y., not later than January 27. Abstracts received on or before December 31 will appear in the January issue of the Bulletin. By invitation of the Program Committee, Professor R. P. Agnew will give an address entitled *Properties of generalized definitions of limit*.

R. G. D. RICHARDSON, *Secretary of the Society*.

Articles for insertion in the BULLETIN should be typewritten, double spaced, and the author should keep a complete copy. Papers in analysis or in algebra should be sent to L. M. GRAVES, University of Chicago, Chicago, Ill.; in other fields to P. A. SMITH, Barnard College, Columbia University, New York, N. Y. Reviews should be sent to TOMLINSON FORT, Lehigh University, Bethlehem, Pa., and items for Notes to H. W. KUHN, Ohio State University, Columbus, Ohio. All other communications to the editors should be addressed to the Managing Editor, D. R. CURTISS, Northwestern University, Evanston, Ill.

The initial fees and the annual dues of members of the Society (see this BULLETIN, p. 322, May, 1930; and the List of Officers and Members, September, 1938, p. 75) are payable to the Treasurer of the Society, Professor B. P. Gill, Low Memorial Library, 531 West 116th St., New York, N. Y.

CONTENTS

Vol. 44, No. 10 OCTOBER, 1938 Whole No. 469

	Page
A note on normal division algebras of prime degree. By A. A. ALBERT.....	649
Quelques remarques sur les relations entre les notions d'écart régulier et de distance. By N. ARONSZAJN.....	653
A symmetric representation of the twenty-seven lines on a cubic surface by lines in a finite geometry. By J. S. FRAME.....	658
A sufficiency proof for isoperimetric problems in the calculus of variations. By M. R. HESTENES.....	662
A new summation method for divergent series. By W. A. MERSMAN.....	667
Metric properties of the cylinder of Kubota. By RUTH B. RASMUSEN.....	674
Apolarity of trilinear forms and pencils of bilinear forms. By R. M. THRALL.....	678
On some new congruences in the theory of Bernoulli's numbers. By N. G. W. H. BEEGER.....	684
Concerning R. L. Moore's Axiom 5. By F. B. JONES.....	689
Enumerative properties of plane connected n -lines. By B. C. WONG.....	693
A relative of the lemma of Schwarz. By E. F. BECKENBACH..	698
Some iterated integrals in the fractional calculus. By M. S. MACPHAIL.....	707
Transformation of bases for relative linear sets. By MARGARETE C. WOLF.....	716
A note on the elementary divisor theory in non-commutative domains. By TADASI NAKAYAMA.....	719
On a mixed boundary condition for harmonic functions. By HILLEL PORITSKY.....	723
Polygenic functions whose associated element-to-point transformation converts unions into points. By EDWARD KASNER..	726
On the absolute summability of Fourier series. By W. C. RANDELS.....	733
Algebraic postulates and a geometric interpretation for the Lewis calculus of strict implication. By TANG TSAO-CHEN..	737