

BULLETIN
OF THE
AMERICAN MATHEMATICAL SOCIETY

THE OCTOBER MEETING IN NEW YORK

The three hundred sixteenth meeting of the American Mathematical Society was held at Columbia University, on Saturday, October 27, 1934, extending through the usual morning and afternoon sessions. The attendance included the following one hundred twenty-four members of the Society:

C. R. Adams, R. B. Adams, R. L. Anderson, R. C. Archibald, R. G. Archibald, H. E. Arnold, N. H. Ball, M. F. Becker, Garrett Birkhoff, G. D. Birkhoff, H. F. Bohnenblust, C. B. Boyer, A. D. Bradley, Richard Brauer, H. W. Brinkmann, A. B. Brown, E. W. Brown, R. H. Cameron, A. D. Campbell, W. R. Church, Nancy Cole, W. B. Coleman, H. B. Curry, J. L. Doob, Jesse Douglas, Arnold Dresden, E. J. Finan, T. S. Fiske, W. B. Fite, D. A. Flanders, Tomlinson Fort, R. M. Foster, J. S. Frame, T. C. Fry, C. A. Garabedian, B. P. Gill, C. H. Graves, M. C. Gray, S. L. Greitzer, H. V. Gummere, F. C. Hall, Marshall Hall, E. H. C. Hildebrandt, Einar Hille, Lulu Hofmann, Eberhard Hopf, Harold Hotelling, J. C. Hughes, Ralph Hull, M. H. Ingraham, Nathan Jacobson, S. A. Joffe, R. A. Johnson, E. R. van Kampen, Edward Kasner, L. S. Kennison, J. R. Kline, M. S. Knebelman, B. O. Koopman, E. E. Kramer, H. K. Kutman, A. W. Landers, M. K. Landers, Harry Langman, Solomon Lefschetz, A. M. M. Lehr, E. J. McShane, L. A. MacColl, A. K. Mitchell, H. H. Mitchell, Morris Monsky, Deane Montgomery, C. N. Moore, L. T. Moore, Richard Morris, F. J. Murray, D. S. Nathan, C. A. Nelson, John von Neumann, C. O. Oakley, Oystein Ore, F. W. Owens, H. B. Owens, Walter Prenowitz, R. G. Putnam, W. C. Randels, J. F. Randolph, H. W. Raudenbush, M. S. Rees, Moses Richardson, H. P. Robertson, S. L. Robinson, S. G. Roth, M. F. Schmeiser, I. J. Schoenberg, C. E. Seely, C. G. Shover, L. P. Siceloff, L. G. Simons, James Singer, L. L. Smail, P. A. Smith, G. Y. Sosnow, A. A. Stafford, E. W. Titt, J. L. Vanderslice, I. L. Van Dyck, Oswald Veblen, Morgan Ward, J. F. Wardwell, S. E. Warschawski, G. C. Webber, M. S. Webster, Louis Weisner, M. J. Weiss, M. E. Wells, Hermann Weyl, A. M. Whelan, H. S. White, D. V. Widder, A. H. Wilson, W. A. Wilson, D. W. Woodard, Leo Zippin.

Associate Secretary M. H. Ingraham announced the election of the following persons to membership in the Society:

Mr. Daniel Maccabaeus Dribin, University of Chicago;
Mr. Francis Joseph Murray, Institute for Advanced Study;
Professor Wilbur Judson Robinson, Washington College.

A meeting of the Council was held between the morning and afternoon sessions. A resolution of thanks was transmitted to the President and Board of Trustees of Columbia University for the very fine provision that had been made for the office and library of the Society in the Low Memorial Library Building.

Every member of the Society will be sorry to learn that the resignation of Miss Seely from the New York Office was presented at this meeting of the Council. In acting on the same, the following resolution was passed:

"It is with great regret that the Council of the Society has learned of Miss Seely's decision to retire from the position she has held for so many years. No one who has been associated with the work of the Society can fail to have appreciated the unfailing devotion and notable skill with which Miss Seely has carried on her diverse, complicated, and frequently taxing tasks. In regretfully accepting the resignation, the Council expresses to Miss Seely its high appreciation of her signal contribution to the cause of American mathematics."

Professor J. M. Thomas announced to the Council that Duke University had authorized the immediate establishment of a new journal for mathematical research.

At the beginning of the afternoon session, Professor Emmy Noether, of Bryn Mawr College, delivered, on the invitation of the Program Committee, an address entitled *Modern hyper-complex theories*.

Titles and abstracts of the papers read at the regular sessions follow below. The morning sessions were held in two sections; the papers numbered 1-6 were read before the Section for Analysis, Professor Einar Hille presiding; those numbered 7-13 before the Section for Algebra and Geometry, Professor Oystein Ore presiding. Those numbered 15-28 were read at the general session in the afternoon, Professor H. H. Mitchell presiding. Mr. Herzog was introduced by Professor Ritt, Dr. Zorn by Professor Ore, and Mr. Robinson by Dr. Morrey. The papers whose abstract numbers are followed by the letter *t* were read by title.

1. *Carathéodory measure and a generalization of the Gauss-Green lemma*, by Mr. J. F. Randolph. (Abstract No. 40-11-311.)

2. *Systems of algebraic mixed difference equations*, by Mr. Fritz Herzog. (Abstract No. 40-11-312.)

3. *Functional dependence*, by Dr. A. B. Brown. (Abstract No. 40-11-313.)
4. *On the higher derivatives at the boundary in conformal mapping*, by Dr. S. E. Warschawski. (Abstract No. 40-11-314.)
5. *Extensions of theorems of Descartes and Laguerre to the complex domain*, by Dr. I. J. Schoenberg. (Abstract No. 40-11-315.)
6. *Linear differential equations with almost periodic coefficients*, by Dr. R. H. Cameron (National Research Fellow). (Abstract No. 40-11-316.)
7. *The characterization of plane collineations*, by Mr. Walter Prenowitz. (Abstract No. 40-11-317.)
8. *On the number theory of certain non-maximal domains of integrity of the total matrix algebra of order 4*, by Dr. E. J. Finan. (Abstract No. 40-11-318.)
9. *A theorem in finite projective geometry and a number theory application*, by Dr. James Singer. (Abstract No. 40-11-319.)
10. *On the numerical determination of tables of characteristics of finite groups*, by Dr. J. S. Frame. (Abstract No. 40-11-320.)
11. *Compact zero-dimensional abelian groups*, by Dr. Leo Zippin. (Abstract No. 40-11-321.)
12. *The ten common secants of two twisted cubic curves*, by Professor H. S. White. (Abstract No. 40-11-334.)
13. *On infinite algebra*, by Dr. Max Zorn. (Abstract No. 40-11-335.)
14. *On criteria for Fourier constants of L -integrable functions of several variables*, by Professor C. N. Moore. (Abstract No. 40-11-322.)
15. *Lattices of equivalence relations*, by Mr. Garrett Birkhoff. (Abstract No. 40-11-323.)
16. *On the foundation of abstract algebra*, by Professor Oystein Ore. (Abstract No. 40-11-324.)
17. *On correlation between vectors, and a function associated with the tetrad difference*, by Professor Harold Hotelling. (Abstract No. 40-11-325.)
18. *Note on probability*, by Dr. J. L. Doob. (Abstract No. 40-11-326.)
19. *Ternary arithmetical identities*, by Professor E. T. Bell. (Abstract No. 40-9-308-t.)
20. *Linear extension of complex-valued linear functions in*

Banach space, by Mr. Garrett Birkhoff. (Abstract No. 40-11-327-t.)

21. *On monogenic extension of linear functionals*, by Mr. Garrett Birkhoff. (Abstract No. 40-11-328-t.)

22. *Orthogonality in normed vector spaces*, by Mr. Garrett Birkhoff. (Abstract No. 40-11-329-t.)

23. *On a generalized tangent vector*. Paper II, by Professor H. V. Craig. (Abstract No. 40-11-330-t.)

24. *The number of trisecants of a space curve of order m which meet an i -fold secant*, by Dr. L. A. Dye. (Abstract No. 40-9-300-t.)

25. *On summation of derived series of the conjugate Fourier series*. II, by Professor A. F. Moursund. (Abstract No. 40-9-309-t.)

26. *The Bloch constant \mathfrak{A} for a schlicht function*, by Mr. R. M. Robinson. (Abstract No. 40-11-331-t.)

27. *Concerning curves of finite degree and local separating points*, by Professor G. T. Whyburn. (Abstract No. 40-11-332-t.)

28. *A decomposition theorem for continua*, by Professor G. T. Whyburn. (Abstract No. 40-11-333-t.)

J. R. KLINE
Associate Secretary

THE MATHEMATICAL CONGRESS IN STOCKHOLM

The eighth Scandinavian mathematical congress was held at the University of Stockholm, from Tuesday to Saturday, August 14–18, 1934. The proceedings were opened Tuesday morning by Professor E. Phragmén, who was elected president of the Congress. About two hundred twenty-five persons had registered, including fifty family members. The arrangements of the organization committee and of the ladies' committee were well planned and superbly executed, and the efficient secretary, Mr. W. Odhnoff, was singled out for a toast. There was a reception supper dance in the Golden Room of the Town Hall on Tuesday evening, and a final banquet given by the Mittag-Leffler Institute at the summer restaurant "Hasselbacken" on Saturday evening. At the latter, Professor R. Nevanlinna extended the invitation of the Finnish mathematicians to