

## THE APRIL MEETING IN NEW YORK

The three hundred fifth regular meeting of the American Mathematical Society was held at Columbia University on Friday and Saturday, April 14–15, 1933. The attendance included the following one hundred twenty-one members of the Society:

C. R. Adams, R. B. Adams, R. P. Agnew, R. L. Anderson, R. G. Archibald, Max Astrachan, M. J. Babb, N. H. Ball, M. F. Becker, A. H. Black, H. F. Bohnenblust, Samuel Borofsky, Joseph Bowden, A. B. Brown, J. H. Bushey, S. S. Cairns, R. H. Cameron, B. H. Camp, P. A. Caris, Alonzo Church, W. R. Church, J. A. Clarkson, J. M. Clarkson, W. B. Coleman, George Comenetz, E. L. Culbreth, E. H. Cutler, M. F. Deuring, B. F. Dostal, Jesse Douglas, Arnold Dresden, J. K. Dyer, H. T. Engstrom, J. M. Feld, W. B. Fite, D. A. Flanders, W. W. Flexner, R. M. Foster, Orrin Frink, C. A. Garabedian, H. M. Gehman, B. P. Gill, R. E. Gilman, H. S. Grant, M. C. Gray, C. C. Grove, R. M. Gut, Alan Hazeltine, Einar Hille, Lulu Hofmann, T. R. Hollcroft, G. M. Hopper, I. O. Horsfall, Harold Hotelling, R. S. Hoyt, J. C. Hughes, Nathan Jacobson, S. A. Joffe, R. A. Johnson, F. E. Johnston, Edward Kasner, J. R. Kline, P. A. Knedler, Harry Langman, V. V. Latshaw, Elihu Lazarus, Solomon Lefschetz, A. K. Leon, E. R. Lorch, E. O. McCormick, L. A. MacColl, H. M. MacNeille, A. E. Meder, H. H. Mitchell, Richard Morris, G. W. Mullins, C. A. Nelson, E. P. Northrop, Oystein Ore, Victor Perlo, H. R. Phalen, R. S. Pieters, Hillel Poritsky, R. G. Putnam, H. W. Raudenbush, M. S. Rees, J. F. Ritt, S. L. Robinson, Benjamin Rosenbaum, J. B. Rosser, I. J. Schoenberg, C. E. Seely, Casper Shanok, I. M. Sheffer, J. A. Shohat, C. G. Shover, L. G. Simons, Abraham Sinkov, M. H. Stone, E. E. Strock, H. G. Swain, Paul Szabo, J. D. Tamarkin, H. B. Thiessen, T. Y. Thomas, E. W. Titt, C. C. Torrance, C. B. Tucker, J. V. Uspensky, R. J. Walker, Louis Weisner, Albert Wertheimer, A. P. Wheeler, H. S. White, Hassler Whitney, C. R. Wilson, W. A. Wilson, Clement Winston, H. P. Wirth, R. C. Yates, Leo Zippin.

The meeting opened on Friday morning with two sectional sessions, Geometry and Algebra, and Analysis and Applications. Friday afternoon was devoted to an address by Professor Oystein Ore, on *Abstract ideal theory and applications*, with discussion led by Dr. M. F. Deuring and Professor H. T. Engstrom. A general session was held on Saturday morning, at the close of which Professor J. V. Uspensky delivered an address entitled *Application of number theory to some problems of integration of elementary functions*. The addresses of Professors Ore and Uspensky were delivered at the invitation of the program committee.

Greetings were sent by telegram to the members of the Society at Chicago on the occasion of the symposium held there in memory of the late Professor E. H. Moore, expressing the desire of the New York group to join in honoring that distinguished mathematician. These greetings were acknowledged by telegram by the Chicago group.

Titles and cross references to the papers (other than invited addresses) read at this meeting follow below; papers whose abstract numbers are followed by the letter *t* were read by title. The papers numbered 1 to 14 were read before the section of Geometry and Algebra, Professor W. A. Wilson presiding; those numbered 15 to 29 before the section of Analysis and Applications, Professor J. D. Tamarkin presiding; those numbered 30 to 34 before the general session, Professor C. R. Adams presiding. Professor H. H. Mitchell presided during Professor Ore's address, and Professor J. D. Tamarkin during Professor Uspensky's. Mr. Claytor was introduced by Professor J. R. Kline, and Dr. Saks by Professor J. D. Tamarkin.

1. *Characteristics of multiple curves and their residuals*, by Professor T. R. Hollcroft. (Abstract No. 39-5-148.)

2. *Types of involutorial space transformations associated with certain rational curves. Composite basis elements*, by Dr. Amos Black. (Abstract No. 39-5-149.)

3. *Involutorial line transformations defined by Cremona plane involutions*, by Dr. J. M. Clarkson. (Abstract No. 39-5-150.)

4. *On the triangulation of regular loci*, by Dr. S. S. Cairns. (Abstract No. 39-5-151.)

5. *Concerning the definition of limit point*, by Professor H. M. Gehman. (Abstract No. 39-5-152.)

6. *A problem of Klein concerning the real roots of an algebraic equation*, by Dr. I. J. Schoenberg. (Abstract No. 39-5-153.)

7. *On the zeros of certain zeta functions*, by Dr. M. F. Deuring. (Abstract No. 39-5-154.)

8. *Convex polyhedra and criteria for irreducibility*. Preliminary report, by Mr. Casper Shanok. (Abstract No. 39-5-155.)

9. *Normal congruences of parabolas*, by Professor Edward Kasner. (Abstract No. 39-5-156.)

10. *Concerning powers of certain classes of ideals in a cyclotomic realm which give the principal class*, by Mr. H. S. Grant. (Abstract No. 39-5-157.)

11. *Topological immersion of Peanian continua in a spherical surface*, by Mr. W. S. Claytor. (Abstract No. 39-5-158.)
12. *Convex domains and linear combinations of continuous functions*, by Dr. I. J. Schoenberg. (Abstract No. 39-5-159-t.)
13. *Decompositions of continua by means of local separating points*, by Dr. G. T. Whyburn. (Abstract No. 39-5-160-t.)
14. *On a certain function connected with polynomials in a Galois field*, by Professor Leonard Carlitz. (Abstract No. 39-5-161-t.)
15. *New necessary and sufficient conditions that a transformation be almost periodic*, by Mr. R. H. Cameron. (Abstract No. 39-5-162.)
16. *Differentiable functions defined on closed sets*, by Dr. Hassler Whitney (National Research Fellow). (Abstract No. 39-5-163.)
17. *Certain linear functional equations, and their relation to a regular singular point of a differential equation*, by Professor I. M. Sheffer. (Abstract No. 39-5-164.)
18. *On the numerators of the convergents of the Stieltjes continued fractions*, by Dr. Jacob Sherman. (Abstract No. 39-5-165-t.)
19. *On the mechanical quadratures formulas related to Hermite and Laguerre polynomials*, by Dr. Clement Winston. (Abstract No. 39-5-166-t.)
20. *Application of analytic function theory to two-dimensional elasticity problems*, by Dr. Hillel Poritsky. (Abstract No. 39-5-167.)
21. *The  $\chi^2$  test of goodness of fit*, by Dr. Selby Robinson (National Research Fellow). (Abstract No. 39-5-168.)
22. *On non-factorable transformations of double sequences*, by Professor C. R. Adams. (Abstract No. 39-5-169.)
23. *Integral functions obtained by compounding polynomials*, by Professor J. F. Ritt. (Abstract No. 39-5-170.)
24. *Application of Bernoulli polynomials of negative order to differencing*. Second paper, by Dr. B. F. Kimball. (Abstract No. 39-5-171-t.)
25. *On some applications of the Tchebycheff inequality for definite integrals*, by Professor J. A. Shohat. (Abstract No. 39-5-172-t.)

26. *A criterion for testing the hypothesis of mutual independence of a set of normal multivariate populations*, by Dr. S. S. Wilks (International Research Fellow). (Abstract No. 39-5-173-t.)

27. *Line integrals as a measure of polynomial approximation to analytic functions*, by Professor J. L. Walsh. (Abstract No. 39-5-174-t.)

28. *Addition to the note "On some functionals,"* by Dr. Stanislaw Saks. (Abstract No. 39-5-175-t.)

29. *On equations in mixed differences, IV*, by Mr. L. B. Robinson. (Abstract No. 39-5-176-t.)

30. *Derivatives with respect to functions of bounded variation*, by Professor R. L. Jeffery. (Abstract No. 39-5-177-t.)

31. *On definitions of bounded variation for functions of two variables*, by Professor C. R. Adams and Mr. J. A. Clarkson. (Abstract No. 39-5-178.)

32. *On the transfinite diameter for a linear interval*, by Professor J. A. Shohat. (Abstract No. 39-5-179.)

33. *Questions of relative inclusion in the domain of Hausdorff matrices*, by Professors Einar Hille and J. D. Tamarkin. (Abstract No. 39-5-180.)

34. *On the summability of Fourier series, IV*, by Professors Einar Hille and J. D. Tamarkin. (Abstract No. 39-5-181.)

J. R. KLINE, *Associate Secretary*