THE MARCH MEETING IN NEW YORK

The three hundred twelfth regular meeting of the American Mathematical Society was held at Columbia University, on Friday and Saturday, March 30–31, 1934. The attendance included the following one hundred fifty-five members of the Society:

C. R. Adams, H. S. Adams, R. B. Adams, A. A. Albert, D. B. Ames, R. C. Archibald, R. G. Archibald, H. E. Arnold, R. P. Bailey, S. F. Barber, M. F. Becker, A. A. Bennett, Garrett Birkhoff, L. M. Blumenthal, Salomon Bochner, H. F. Bohnenblust, Samuel Borofsky, J. W. Bower, A. D. Bradley, A. B. Brown, L. H. Bunyan, J. H. Bushey, R. H. Cameron, A. D. Campbell, E. T. Carroll-Rusk, W. R. Church, J. A. Clarkson, J. M. Clarkson, A. B. Coble, George Comenetz, L. P. Copeland, Byron Cosby, E. H. Cutler, J. L. Doob, J. L. Dorroh, Jesse Douglas, H. T. Engstrom, H. S. Everett, Fay Farnum, J. M. Feld, W. B. Fite, D. A. Flanders, M. M. Flood, A. H. Fox, T. C. Fry, A. S. Galbraith, C. A. Garabedian, H. M. Gehman, B. P. Gill, W. O. Gordon, M. C. Graustein, W. C. Graustein, C. H. Graves, M. C. Gray, S. L. Greitzer, C. C. Grove, Laura Guggenbühl, Margaret Gurney, N. L. Haight, Morris Halperin, Alan Hazeltine, G. A. Hedlund, Robert Henderson, M. R. Hestenes, E. H. C. Hildebrandt, Einar Hille, Lulu Hofmann, T. R. Hollcroft, G. M. Hopper, Harold Hotelling, W. G. Hubert, J. C. Hughes, Ralph Hull, M. H. Ingraham, B. C. Jessen, R. A. Johnson, E. R. van Kampen, Edward Kasner, J. R. Kline, P. A. Knedler, K. W. Lamson, Harry Langman, V. V. Latshaw, Solomon Lefschetz, D. H. Lehmer, A. M. M. Lehr, D. C. Lewis, W. R. Longley, E. R. Lorch, L. L. Lowenstein, E. J. McShane, L. A. MacColl, Saunders MacLane, H. F. MacNeish, R. S. Martin, A. E. Meder, H. H. Mitchell, Deane Montgomery, L. T. Moore, D. S. Nathan, C. A. Nelson, John von Neumann, E. P. Northrop, C. O. Oakley, Oystein Ore, T. S. Peterson, R. S. Pieters, Walter Prenowitz, W. C. Randels, H. W. Raudenbush, H. W. Reddick, M. S. Rees, F. G. Reynolds, R. G. D. Richardson, J. F. Ritt, H. P. Robertson, Selby Robinson, S. G. Roth, H. A. Ruger, S. A. Schelkunoff, M. F. Schmeiser, I. J. Schoenberg, H. E. Schoonmaker, C. E. Seely, L. P. Siceloff, James Singer, L. L. Smail, A. H. Smith, C. E. Smith, P. A. Smith, W. M. Smith, Virgil Snyder, A. A. Stafford, E. P. Starke, H. G. Swain, J. D. Tamarkin, C. C. Torrance, A. W. Tucker, Annita Tuller, J. L. Vanderslice, H. S. Vandiver, R. J. Walker, Louis Weisner, A. M. Whelan, H. S. White, G. T. Whyburn, D. V. Widder, R. L. Wilder, S. S. Wilks, John Williamson, W. A. Wilson, H. P. Wirth, D. W. Woodard, Oscar Zariski, Leo Zippin.

The meeting opened on Friday morning with two sectional sessions, Geometry and Foundations, and Algebra and Number Theory. Friday afternoon was devoted to a Symposium on Algebraic Geometry, at which the following addresses were pre-

sented: *Some new aspects of the theory of plane algebraic curves*, by Professor Oskar Zariski; *Riemann matrices*, by Professor A. A. Albert; *Some recent contributions to rational transformations*, by Professor Virgil Snyder; *Cremona diophantine equations*, by Professor A. B. Coble. A general session was held on Saturday morning.

There was no meeting of the Council. The Trustees met at the Faculty Club on Saturday afternoon.

Titles and cross references to the abstracts of the papers (other than Symposium 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 Foundations, Professors Virgil Snyder and H. S. White presiding; those numbered 15 to 33 before the section of Algebra and Number Theory, Professors W. A. Wilson and Oystein Ore presiding; those numbered 34 to 53 at the general session, President Coble presiding. Professor S. Lefschetz presided at the Symposium. Mr. Fialkow was introduced by Professor Kasner, Mr. Murray by Professor Koopman, and Professor Zygmund by Professor Tamarkin.

1. *Webs of quadric hypersurfaces in r dimensions*, by Professor T. R. Hollcroft. (Abstract No. 40-3-113.)

2. *An involutorial line transformation determined by a bilinear congruence of twisted elliptic quartics*, by Professor Virgil Snyder and Dr. J. M. Clarkson. (Abstract No. 40-3-114.)

3. *On certain area-preserving maps*, by Dr. A. B. Brown and Mr. Morris Halperin. (Abstract No. 40-3-115.)

4. *Exceptional curves of the first kind* (preliminary report), by Dr. S. F. Barber (National Research Fellow) and Dr. Jacob Yerushalmy. (Abstract No. 40-3-116.)

5. *The metric characterization of the n-dimensional spherical space*, by Dr. L. M. Blumenthal (National Research Fellow). (Abstract No. 40-3-117.)

6. *One-parameter groups of transformations in abstract vector spaces*, by Dr. D. S. Nathan (National Research Fellow). (Abstract No. 40-3-118.)

7. *Families of ∞^3 conics which are curvature trajectories*, by Mr. George Comenetz. (Abstract No. 40-3-119.)

8. *General theorems on trajectories and lines of force*, by Mr. Aaron Fialkow. (Abstract No. 40-3-105.)

9. *Mixed groups connected with polygons*, by Professor Edward Kasner. (Abstract No. 40-3-120.)

10. *Generalized closed manifolds in n-space*, by Professor R. L. Wilder. (Abstract No. 40-3-121.)

11. *Independent postulates related to C. I. Lewis's theory of strict implication*, by Professor E. V. Huntington. (Abstract No. 40-3-106-*t*.)

12. *A systematic theory of mathematical symbolism*, by Mr. Saunders MacLane. (Abstract No. 40-3-122-*t*.)

13. *A metrical property of point set transformations*, by Dr. Deane Montgomery (National Research Fellow). (Abstract No. 40-3-123-*t*.)

14. *Non-alternating transformations*, by Dr. G. T. Whyburn. (Abstract No. 40-3-124-*t*.)

15. *Criteria for the irreducibility of polynomials*, by Professor Louis Weisner. (Abstract No. 40-3-107.)

16. *Remarks on polynomials taking prime values*, by Professor Oystein Ore. (Abstract No. 40-3-149.)

17. *The covariants of two quadratic forms in n variables*, by Dr. John Williamson. (Abstract No. 40-3-125.)

18. *New types of irreducibility criteria*, by Mrs. Grace M. Hopper and Professor Oystein Ore. (Abstract No. 40-3-126.)

19. *On the representation of finite dual groups*, by Mr. Saunders MacLane. (Abstract No. 40-3-127.)

20. *A canonical generation of rational cyclic algebras of odd prime degree*, by Dr. Ralph Hull (National Research Fellow). (Abstract No. 40-3-128.)

21. *An extended theory of Bernoulli and Euler numbers*, by Dr. D. H. Lehmer. (Abstract No. 40-3-129.)

22. *Pseudo-transitivity in finite and infinite groups*, by Dr. Selby Robinson. (Abstract No. 40-3-130.)

23. *Combinatorial relations in finite projective geometries*, by Mr. Garrett Birkhoff. (Abstract No. 40-3-104.)

24. *A solution of the principal problem in the theory of Riemann matrices*, by Professor A. A. Albert. (Abstract No. 40-3-131-*t*.)

25. *A matrix proof of the Poincaré theorem on impure Riemann matrices*, by Professor A. A. Albert. (Abstract No. 40-3-132-*t*.)

26. *Cyclic fields of degree p^n over F of characteristic p*, by Professor A. A. Albert. (Abstract No. 40-3-133-*t*.)

27. *Integral solutions of $P^4 + 4Q^4 = R^4 + 4S^4$*, by Professor P. A. Caris. (Abstract No. 40-3-134-*t*.)

28. *Concerning the direct product of algebras*, by Dr. J. L. Dorroh. (Abstract No. 40-3-135-*t*.)

29. *On the lattice theory of ideals*, by Mr. Garrett Birkhoff. (Abstract No. 40-3-136-*t*.)

30. *On Euler squares*, by Professor Edward Fleisher. (Abstract No. 40-3-137-*t*.)

31. *On the expansion coefficients of the functions $u/\operatorname{sn} u$ and $u^2/\operatorname{sn}^2 u$*, by Dr. R. D. James (National Research Fellow). (Abstract No. 40-3-138-*t*.)

32. *Transposition of indices in multiple-labeled determinants*, by Mr. Rufus Oldenburger. (Abstract No. 40-3-139-*t*.)

33. *Factorization of hyperspace matrices into non-singular matrices*, by Mr. Rufus Oldenburger. (Abstract No. 40-3-140-*t*.)

34. *Sufficient conditions for the problem of Bolza in the calculus of variations*. II, by Dr. M. R. Hestenes (National Research Fellow). (Abstract No. 40-3-141.)

35. *Linear transformations between distinct Hilbert spaces*, by Mr. F. J. Murray. (Abstract No. 40-3-142.)

36. *Summability of the derived conjugate Fourier series* (preliminary report), by Dr. A. H. Smith. (Abstract No. 40-3-143.)

37. *Properties of functions of two variables*, by Dr. Deane Montgomery (National Research Fellow). (Abstract No. 40-3-144.)

38. *Hypertranscendental extensions of partial differential fields*, by Dr. H. W. Raudenbush. (Abstract No. 40-3-145.)

39. *Probability distributions and statistics*, by Dr. J. L. Doob (National Research Fellow). (Abstract No. 40-3-146.)

40. *On the order of a system of algebraic differential equations*, by Professor J. F. Ritt. (Abstract No. 40-3-147.)

41. *On asymptotic distributions of arithmetical functions*, by Dr. I. J. Schoenberg. (Abstract No. 40-3-148.)

42. *A metrically transitive system*, by Dr. G. A. Hedlund (National Research Fellow). (Abstract No. 40-3-150-*t*.)

43. *Note on the form of a first-order partial differential equation*, by Dr. A. B. Brown. (Abstract No. 40-3-151-*t*.)

44. *On approximation to an analytic function by polynomials*, by Professor O. J. Farrell. (Abstract No. 40-3-152-*t*.)

45. *On the determinateness of the multi-dimensional momentum problem*, by Dr. E. K. Haviland. (Abstract No. 40-3-153-*t*.)

46. *Partial differential operators as linear transformations between Hilbert spaces*, by Mr. F. J. Murray. (Abstract No. 40-3-154-*t*.)

47. *Almost periodic functions in a group*, by Professor John von Neumann. (Abstract No. 40-3-155-*t*.)

48. *Algebraic difference equations*, by Professor J. F. Ritt. (Abstract No. 40-3-156-*t*.)

49. *A hypergeometric parametric function defining the range of de la Vallée-Poussin summation*, by Professors George Rutledge and R. D. Douglass. (Abstract No. 40-3-157-*t*.)

50. *Some points in the theory of trigonometric and power series*, by Professor Antoni Zygmund. (Abstract No. 40-3-108-*t*.)

51. *On the convergence and overconvergence of sequences of polynomials of best approximation*, by Professor J. L. Walsh. (Abstract No. 40-5-191-*t*.)

52. *On interpolation by polynomials*, by Professor J. L. Walsh. (Abstract No. 40-5-192-*t*.)

53. *Concerning locally peripherally separable spaces*, by Mr. F. B. Jones. (Abstract No. 40-5-193-*t*.)

J. R. KLINE,
Associate Secretary