

## THE APRIL MEETING IN NEW YORK

The three hundred thirtieth meeting of the American Mathematical Society was held at Columbia University on Friday and Saturday, April 10–11, 1936. The attendance included the following one hundred eighty-four members of the Society:

C. R. Adams, R. P. Agnew, E. S. Akeley, R. L. Anderson, R. C. Archibald, Reinhold Baer, F. E. Baker, M. F. Becker, Felix Bernstein, Garrett Birkhoff, Gertrude Blanch, L. M. Blumenthal, R. P. Boas, H. F. Bohnenblust, Samuel Borofsky, J. W. Bower, C. B. Boyer, H. W. Brinkmann, J. H. Bushey, Jewell Hughes Bushey, R. H. Cameron, B. H. Camp, E. W. Cannon, Leonard Carlitz, E. W. Chittenden, W. W. S. Claytor, W. B. Coleman, George Comenetz, E. G. H. Comfort, Richard Courant, A. R. Crathorne, E. L. Culbreth, H. B. Curry, E. H. Cutler, L. S. Dederick, J. L. Doob, Jesse Douglas, Arnold Dresden, Nelson Dunford, Aaron Fialkow, T. S. Fiske, W. B. Fite, M. M. Flood, Tomlinson Fort, M. C. Foster, R. M. Foster, Philip Franklin, T. C. Fry, H. M. Gehman, J. J. Gergen, B. P. Gill, W. C. Graustein, L. M. Graves, M. C. Gray, C. C. Grove, K. W. Halbert, Marshall Hall, H. J. Hamilton, E. R. Hedrick, Robert Henderson, M. R. Hestenes, E. H. C. Hildebrandt, J. D. Hill, Einar Hille, Lulu Hofmann, T. R. Hollcroft, Charles Hopkins, G. M. Hopper, S. E. Hotelling, E. M. Hull, S. A. Joffe, R. A. Johnson, B. W. Jones, I. N. Kagno, E. R. van Kampen, Nathan Kaplan, Edward Kasner, L. S. Kennison, J. R. Kline, M. S. Knebelman, T. L. Koehler, H. L. Krall, Solomon Kullback, K. W. Lamson, R. E. Langer, V. V. Latshaw, Solomon Lefschetz, D. H. Lehmer, Marie Litzinger, W. R. Longley, E. R. Lorch, L. L. Lowenstein, N. H. McCoy, L. A. MacColl, Saunders MacLane, N. B. MacLean, H. M. MacNeille, H. F. MacNeish, R. S. Martin, W. T. Martin, A. E. Meder, G. M. Merriman, A. N. Milgram, E. W. Miller, E. C. Molina, Deane Montgomery, L. T. Moore, D. S. Morse, Marston Morse, S. B. Myers, D. S. Nathan, C. A. Nelson, John von Neumann, E. P. Northrop, C. O. Oakley, Alta Odoms, Oystein Ore, E. R. Ott, F. W. Owens, H. B. Owens, C. K. Payne, T. S. Peterson, H. B. Phillips, A. E. Pitcher, E. L. Post, G. B. Price, R. G. Putnam, H. A. Rademacher, W. C. Randels, Robert Rawhouser, M. S. Rees, Moses Richardson, R. G. D. Richardson, John Riordan, J. H. Roberts, R. M. Robinson, S. L. Robinson, S. G. Roth, H. A. Ruger, I. J. Schoenberg, Wladimir Seidel, Stefan Serghiesco, I. M. Sheffer, Jacob Sherman, Max Shiffman, J. A. Shohat, R. C. Shook, C. G. Shover, L. G. Simons, James Singer, Abraham Sinkov, L. L. Smail, P. A. Smith, N. E. Steenrod, M. H. Stone, D. J. Struik, J. D. Tamarkin, J. M. Thomas, T. Y. Thomas, E. W. Titt, A. W. Tucker, W. S. Turpin, H. E. Vaughan, Oswald Veblen, G. P. Wadsworth, J. F. Wardwell, S. E. Warschawski, C. W. Watkeys, G. C. Webber, Albert Wertheimer, A. P. Wheeler, H. S. White, Hassler Whitney, G. T. Whyburn, S. S. Wilks, W. A. Wilson, E. W. Wilson, Clement Winston, Aurel Wintner, H. P. Wirth, W. H. Wise, H. N. Wright, Leo Zippin, Max Zorn.

The meeting opened on Friday morning with two sectional sessions, one for Algebra and Analysis and one for Geometry.

Friday afternoon was devoted to a symposium on *Mathematical statistics* at which the following addresses were presented: *Methods of obtaining probability distributions*, by Professor B. H. Camp; *The characterization of a distribution function through its moments*, by Professor J. A. Shohat; *The structure and sampling theory of certain generalized likelihood test criteria*, by Dr. S. S. Wilks. Because of illness Professor Harold Hotelling was unable to present his address, *The method of maximum likelihood*, which was to have been a part of this symposium.

Saturday morning there were two sectional sessions, one for Number Theory and Group Theory and one for Analysis. These sessions were followed by a general session at which Professor C. Kuratowski gave an address entitled *On a topological method of proving existential theorems*.

A meeting of the Council was held at 5:00 P.M. on Friday in the Faculty Club of Columbia University. The election of the following persons to membership in the Society was announced by the Secretary:

Professor Evelyn Niemann Akeley, Skidmore College, Saratoga Springs, N. Y.;  
 Mr. Martin Collett Bailey, State College, Dover, Del.;  
 Mr. Clair Eugene Carey, Clarion State Teachers College, Clarion, Pa.;  
 Mrs. Natividad Rosado Javier, Silliman University, Danaguete, P. I.;  
 Professor Otto Laporte, University of Michigan;  
 Dr. Walter Leighton, Harvard University;  
 Professor Alejandro Melchor, University of the Philippines;  
 Mr. John Leo Nagle, National Park Service, Washington, D. C.;  
 Dr. Edwin N. Oberg, Rochester Junior College, Rochester, Minn.;  
 Mr. Arthur P. O'Mara, Loyola University, Chicago, Ill.;  
 Professor Karl B. Patterson, Duke University;  
 Mr. Paul Milton Pepper, University of Cincinnati;  
 Dr. Raphael Mitchel Robinson, Brown University;  
 Mr. Walter Edwin Sewell, Harvard University;  
 Mr. Norman Earl Steenrod, Princeton University;  
 Dr. John Murray Thompson, University of California, Berkeley;  
 Professor Albert Potter Wills, Columbia University.

As nominees of the Department of Mathematics of the University of Chicago:

Mr. Carl Herbert Denbow, University of Chicago;  
 Mr. Nathan Abraham Moscovitch, University of Chicago;  
 Mr. Malcolm F. Smiley, University of Chicago;  
 Mr. Frederick Albert Valentine, University of Chicago.

As nominee of Wellesley College:

Miss Mary Dean Clement, Ward-Belmont School, Nashville, Tenn.

It was announced that the following person had entered the Society under the reciprocity agreement:

Dr. Reinhold Baer, Institute for Advanced Study.

The following appointments by President Lefschetz were announced: as representative of the Society at the inauguration of Fred Garrigus Holloway as president of Western Maryland College, April 25, 1936, Professor Abraham Cohen; as representative of the Society on the sectional committee of the American Standards Association, Professor A. A. Bennett; as representatives of the Society to the International Congress of Mathematicians at Oslo, Professors G. D. Birkhoff, H. F. Blichfeldt, L. P. Eisenhart, Solomon Lefschetz, Marston Morse, Virgil Snyder, Oswald Veblen, and Norbert Wiener; as committee on arrangements for the 1936 Annual Meeting, Professors J. M. Thomas (chairman), W. W. Elliott, J. R. Kline, J. W. Lasley, and J. H. Roberts.

It was reported that the invitation of Pennsylvania State College to hold the Summer Meeting of 1937 at that institution had been accepted. Other meetings of the Society in 1937 were announced as follows: New York, February 20, March 26–27; Chicago, April 9–10.

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 18 were read before the Section for Algebra and Analysis, Professors R. E. Langer and H. B. Phillips presiding; those numbered 19 to 29 before the Section for Geometry, Professor E. W. Chittenden presiding; those numbered 30 to 36 before the Section for Number Theory and Group Theory, Professor T. R. Hollcroft presiding; those numbered 37 to 43 before the Saturday morning Section for Analysis, Professor L. M. Graves presiding; and those numbered 44 to 61 at the general session, Professor Solomon Lefschetz presiding. Mr. E. C. Molina presided at the Symposium. Dr. R. M. Robinson was introduced by Professor J. D. Tamarkin, Mr. J. J. DeCicco by Professor Edward Kasner, and Mr. N. E. Steenrod by Professor Solomon Lefschetz.

1. *Note on some equations without affect*, by Dr. Saunders MacLane. (Abstract No. 42-5-196.)

2. *On products of successive terms of an arithmetic series*, by Mr. Benjamin Rosenbaum. (Abstract No. 42-5-206-t.)
3. *A characterization of a class of polynomials*, by Professor I. M. Sheffer. (Abstract No. 42-5-210.)
4. *A new class of transcendental numbers*, Professor Philip Franklin. (Abstract No. 42-5-183.)
5. *On certain equations in a relative-cyclic field*, by Professor Leonard Carlitz. (Abstract No. 42-5-177.)
6. *Products of methods of summability*, by Professor R. P. Agnew. (Abstract No. 42-5-175.)
7. *Bloch functions*, by Dr. R. M. Robinson. (Abstract No. 42-5-205.)
8. *Rational tensor functions of the coefficients of a pair of quadratic differential forms and their first derivatives* (preliminary report), by Professor E. S. Akeley. (Abstract No. 42-5-226.)
9. *Some theorems on Fourier transforms and conjugate trigonometric integrals*, by Mr. R. P. Boas. (Abstract No. 42-3-114.)
10. *On the summability of Fourier series*, by Dr. W. C. Randles. (Abstract No. 42-5-201.)
11. *On the determination of earth conductivity from observed surface potentials*, by Professor R. E. Langer. (Abstract No. 42-5-194.)
12. *On the uniqueness of invariant Lebesgue measures*, by Professor John von Neumann. (Abstract No. 42-5-237.)
13. *On expansions in terms of a certain general class of functions*, by Dr. W. T. Martin. (Abstract No. 42-5-197-t.)
14. *On some hermitian forms associated with two given curves of the complex plane*, by Professor Gabriel Szegö. (Abstract No. 42-5-214-t.)
15. *On Phragmén-Lindelöf's principle*, by Dr. L. V. Ahlfors. (Abstract No. 42-5-225-t.)
16. *On the completing of a Hausdorff space*, by Professor L. M. Graves. (Abstract No. 42-5-185-t.)
17. *On the completeness of Lambert functions. II*, by Professors Einar Hille and Otto Szász. (Abstract No. 42-5-229-t.)
18. *Direct decompositions*, by Professor Oystein Ore. (Abstract No. 42-5-200-t.)
19. *The triangulation of surfaces and the Heawood color formula*, by Mr. I. N. Kagno. (Abstract No. 42-5-189.)

20. *Relations among characteristics of associated linear systems*, by Professor T. R. Hollcroft. (Abstract No. 42-5-187.)
21. *Non-separating transformations*, by Dr. J. F. Wardwell. (Abstract No. 42-5-218.)
22. *Certain extensions of some separation theorems*, by Mr. A. N. Milgram. (Abstract No. 42-5-198.)
23. *On the convergence of manifolds and irreducible membranes*, by Dr. H. E. Vaughan. (Abstract No. 42-5-217.)
24. *Transformations of reference systems in the space-time of Page*, by Professor H. T. Engstrom and Dr. Max Zorn. (Abstract No. 42-5-181.)
25. *Einstein hypersurfaces of a euclidean space*, by Dr. Nathan Kaplan. (Abstract No. 42-3-115.)
26. *General harmonic transformations*, by Professor Edward Kasner. (Abstract No. 42-5-191.)
27. *Geometry of whirl series*, by Mr. J. J. DeCicco. (Abstract No. 42-5-178.)
28. *The maps of a 4-complex into a 2-sphere*, by Professor Hassler Whitney. (Abstract No. 42-5-220.)
29. *On the behavior of a conformal mapping at a cusp*, by Dr. S. E. Warschawski. (Abstract No. 42-5-219.)
30. *On the fundamental group of a certain class of plane algebraic curves*, by Mr. W. S. Turpin. (Abstract No. 42-5-216.)
31. *Concerning groups of order  $p^m$  whose operations are of order  $\leq p$*  (preliminary report), by Dr. Charles Hopkins. (Abstract No. 42-5-188.)
32. *Universal homology groups*, by Mr. N. E. Steenrod. (Abstract No. 42-5-213.)
33. *Continuous free groups*, by Mr. Garrett Birkhoff. (Abstract No. 42-5-228.)
34. *On a perfect group of order 10,752*, by Dr. Abraham Sinkov. (Abstract No. 42-5-212.)
35. *Number theory in a hypercomplex system*, by Dr. C. G. Shover. (Abstract No. 42-5-211.)
36. *A number theory problem concerning regular simplexes*, by Professor I. J. Schoenberg. (Abstract No. 42-5-207.)
37. *On the order of growth of univalent functions*, by Dr. Wladimir Seidel. (Abstract No. 42-5-209.)

38. *On a property of families of sets*, by Dr. E. W. Miller. (Abstract No. 42-5-199.)
39. *Summability of double Fourier series*, by Professor J. J. Gergen. (Abstract No. 42-5-184.)
40. *Singular quadratic functionals*, by Professor Marston Morse and Dr. Walter Leighton. (Abstract No. 42-3-116-t.)
41. *Functional topology and abstract variational theory*, by Professor Marston Morse. (Abstract No. 42-5-230.)
42. *Minimax principle in the calculus of variations*, by Dr. M. R. Hestenes. (Abstract No. 42-5-186.)
43. *The space  $(BV)$  of functions of bounded variation*, by Professor C. R. Adams. (Abstract No. 42-5-174.)
44. *Tensors associated with a pair of quadratic differential forms*, by Professor E. S. Akeley. (Abstract No. 42-5-227-t.)
45. *A theorem in the theory of numbers as applied to regular polygons*, by Professor W. D. Cairns. (Abstract No. 42-5-176-t.)
46. *Remarks on a preceding paper of J. A. Clarkson*, by Mr. Nelson Dunford and Mr. Anthony Morse. (Abstract No. 42-5-179-t.)
47. *An involutorial transformation determined by three pencils of planes*, by Professor L. A. Dye. (Abstract No. 42-5-180-t.)
48. *Initial motion of fields of force*, by Mr. Aaron Fialkow. (Abstract No. 42-5-182-t.)
49. *A unicity theorem for ordinary differential equations and a postulate system for Lie groups*, by Dr. E. R. van Kampen. (Abstract No. 42-5-190-t.)
50. *A combinatorial condition for planar graphs*, by Dr. Saunders MacLane. (Abstract No. 42-5-195-t.)
51. *On the order of the coefficients of a schlicht function*, by Dr. M. S. Robertson. (Abstract No. 42-5-202-t.)
52. *On the summability by positive typical means of sequences  $f(n\theta)$* , by Dr. M. S. Robertson. (Abstract No. 42-5-203-t.)
53. *Concerning special centers of projection for an algebraic space branch*, by Mr. W. S. Turpin. (Abstract No. 42-5-215-t.)
54. *On the principles of d'Alembert, Jourdain, and Gauss*, by Dr. Max Zorn. (Abstract No. 42-5-224-t.)
55. *Absolute full reducibility of semi-simple distributive linear algebras*, by Dr. Max Zorn. (Abstract No. 42-5-221-t.)
56. *On a formal decomposition theorem for algebras*, by Dr. Max Zorn. (Abstract No. 42-5-223-t.)

57. *Galois theory based on the lemmata of Artin and Baer*, by Dr. Max Zorn. (Abstract No. 42-5-222-t.)

58. *On certain two-point expansions of integral functions of exponential type*, by Professor I. J. Schoenberg. (Abstract No. 42-5-208-t.)

59. *On derivatives of orthogonal polynomials*, by Dr. H. L. Krall. (Abstract No. 42-5-192-t.)

60. *On higher derivatives of orthogonal polynomials*, by Dr. H. L. Krall. (Abstract No. 42-5-193-t.)

61. *A lacunary function with branch point at the origin*, by Mr. L. B. Robinson. (Abstract No. 42-5-204-t.)

J. R. KLINE,  
*Associate Secretary*