59. *On summability of double sequences*, by Dr. R. P. Agnew (National Research Fellow). (Abstract No. 38–5–124–*t.*)

60. *Definition of a field by four postulates*, by Professor W. A. Hurwitz. (Abstract No. 38–5–125–*t.*)

61. *Characterization of collineations on the real projective plane.* Preliminary report, by Mr. Walter Prenowitz. (Abstract No. 38–5–126–*t.*)

TOMLINSON FORT,
Associate Secretary

THE APRIL MEETING IN CHICAGO

The two hundred ninety-eighth regular meeting of the Society was held at the University of Chicago on Friday and Saturday, April 8–9, 1932. About one hundred thirty persons attended the meetings, among whom were the following one hundred six members of the Society:

A. A. Albert, F. L. Axen, W. L. Ayres, R. P. Baker, R. W. Barnard, I. A. Barnett, Walter Bartky, W. D. Baten, S. F. Bibb, G. A. Bliss, Henry Blumberg, D. G. Bourgin, J. W. Bower, R. C. Bullock, R. S. Burington, L. E. Bush, R. D. Carmichael, E. W. Chittenden, A. B. Coble, E. G. H. Comfort, H. H. Conwell, A. T. Craig, H. B. Curry, D. R. Curtiss, L. E. Dickson, R. M. Ely, Arnold Emch, H. P. Evans, H. S. Everett, Gordon Fuller, H. L. Garabedian, Cornelius Gouwens, L. M. Graves, L. W. Griffiths, M. L. Hartung, O. C. Hazlett, M. R. Hestenes, E. H. Hildebrandt, T. H. Hildebrandt, T. F. Holgate, D. L. Holl, M. H. Ingraham, W. C. Krathwohl, A. C. Ladner, E. P. Lane, R. E. Langer, M. I. Logsdon, R. E. Lowney, W. A. Luby, A. C. Lunn, E. B. Lytle, J. S. McNair, C. C. MacDuffee, W. D. MacMillan, W. A. Manning, Morris Marden, A. E. May, J. R. Mayor, E. W. Miller, E. H. Moore, T. W. Moore, E. J. Moulton, F. H. Murray, Rufus Oldenburger, E. J. Olson, G. A. Parkinson, E. D. Pepper, T. S. Peterson, H. H. Pixley, Tibor Radó, G. Y. Rainich, E. A. Rasor, W. T. Reid, H. L. Rietz, P. G. Robinson, W. E. Roth, R. G. Sanger, I. J. Schoenberg, Henry Schultz, Nathan Schwid, H. A. Simmons, E. B. Skinner, H. E. Slaught, Burke Smith, E. S. Sokolinkoff, I. S. Sokolnikoff, A. A. Stafford, R. C. Stephens, P. M. Swingle, V. B. Teach, W. J. Trjitzinsky, P. L. Trump, J. S. Turner, H. L. Turrittin, A. M. Tuttle, J. I. Vass, H. S. Wall, L. E. Ward, K. W. Wegner, R. L. Wilder, F. B. Wiley, K. P. Williams, Y. K. Wong, F. E. Wood, Roscoe Woods, C. R. Worth.

A meeting of the Council was held on Friday afternoon, April 8, in Room 316, Eckhart Hall of the University of Chicago. Associate Secretary Ingraham announced the election of the following persons to membership in the Society:

Professor Scott Buchanan, University of Virginia;
Professor Iris Callaway, Georgia State Teachers College;
Mr. Henry Miot Cox, Georgia School of Technology;
Mr. George Franklin Cramer, Tulane University;
Mr. Merrill Meeks Flood, Princeton University;
Mr. George Frecheville, Agricultural Economics Research Institute, University of Oxford;
Mr. Nathan Jacobson, Princeton University;
Dr. Trinidad J. Jaramillo, Northern Luzon Junior College, Vigan, Philippine Islands;
Mr. Reinhardt Lunde Korgen, Bowdoin College;
Professor Nicolas Kryloff, Kieff, Ukraine, U. S. S. R.;
Mr. Enrique Linares, Central Board of Roads, Panama City;
Professor James Anson McLaughlin, St. Bonaventure's College;
Professor Walter Priest Morse, Ricker Junior College;
Mr. William Lind Morris, Gulf Research Laboratory, Pittsburgh;
Mr. Eugene Purdy Northrop, Yale University;
Mr. William Conrad Randels, Princeton University;
Dr. Max Goy Scherberg, University of Minnesota;
Mr. Jacob Sherman, League Island, Philadelphia;
Mr. Edward A. Shonka, St. Procopius College;
Mrs. Irene Fern Smith, Wilmington, Del.;
Mr. Jacob Reiff Kob Stauffer, University of Chicago;
Mr. Edward Warren Titt, Princeton University;
Mr. Orlin Edward Walder, South Dakota State College.

As Nominees of Allyn and Bacon:

Mr. Reece Croxton Blackwell, Johns Hopkins University;
Mr. George Proctor Wadsworth, Massachusetts Institute of Technology.

As Nominees of the National Life Insurance Company of the United States of America:

Mr. John F. Randolph, Cornell University;
Miss Ida Lucy van Dyck, Brown University.

As Nominees of Members of the Department of Mathematics of the George Washington University:

Mr. James Harvey Edmonston, The George Washington University;
Mr. Daniel Bernard Fisher, The George Washington University;
Mr. Solomon Kullback, The George Washington University;
Dr. Raymond J. Seeger, The George Washington University.

As Nominee of Yale University:

Mr. Augustus Henry Fox, Yale University.

At the meeting of the Council held on April 8, it was decided to omit the Christmas meeting in Chicago for 1932. The dates

for the 1933 spring meeting in Chicago were set for April 14–15, 1933.

On Friday afternoon, Professor R. L. Wilder delivered a Symposium Lecture on *Point sets in three and higher dimensions, and their investigation by means of a unified analysis situs*.

At the beginning of the Saturday morning session, by invitation of the Program Committee, Professor E. P. Lane addressed the Society on *Surfaces and curvilinear congruences*.

On Friday evening members and their guests attended a dinner in the Hotel Windermere West. Professor D. R. Curtiss was toastmaster. Professor W. A. Manning extended a warm invitation to all those present to attend the summer meeting in Los Angeles. Professor R. D. Carmichael spoke of the Transactions. Professor H. L. Rietz paid tribute to the memory of Professor J. W. Young, and expressed the sorrow of all of Professor Young's friends and associates upon his death. One hundred nine people attended this dinner.

The meetings were held in Eckhart Hall. On Friday afternoon tea was served in the Commons Room, and throughout the meeting this room was available for social purposes.

Vice-President E. W. Chittenden and Professor L. M. Graves presided at the Friday morning session, Vice-President W. A. Manning Friday afternoon, and Professors A. B. Coble and E. P. Lane on Saturday morning.

Mr. Nathan was introduced by Professor I. A. Barnett, Dr. Robinson by Professor Chittenden, Miss Schottenfels by Professor Lane, Mr. Matison, Mr. Martin, and Mr. Botsford by Professor A. D. Michal, and Professor Hasse by Professor Albert. Although Professor Stouffer was not present, the work in his paper was briefly discussed by Professor Lane.

General Session, Friday morning.

1. *Functional invariants of integro-differential equations*. Preliminary report, by Professor I. A. Barnett. (Abstract No. 38 5–127.)

2. *On the invariant character of a set of differential equations*, by Mr. Gordon Fuller. (Abstract No. 38–5–128.)

3. *On approximately conformal maps of surfaces*. Preliminary report, by Professor Tibor Radó. (Abstract No. 38–5–129.)

4. *On the Padé table for a power series having a corresponding continued fraction in which the coefficients have limiting values*, by Professor H. S. Wall. (Abstract No. 38-3-75.)

5. *Sphere geometry and the conformal group in function space*, by Mr. D. S. Nathan. (Abstract No. 38-5-130.)

6. *Sampling from many parent populations*, by Professor W. D. Baten. (Abstract No. 38-3-74.)

7. *Some properties of normally correlated variables*, by Dr. A. T. Craig. (Abstract No. 38-5-131.)

8. *Certain cardinal numbers associated with a point in a general topological space*, by Dr. Selby Robinson. (Abstract No. 38-5-132.)

9. *On the interchange of limit and integral for classes of functions in real, complex, and quaternionic numbers*, by Miss I. M. Schottenfels. (Abstract No. 38-5-133.)

10. *Sufficient conditions for a problem of Mayer in the calculus of variations*, by Professor G. A. Bliss and Dr. M. R. Hestenes. (Abstract No. 38-5-134.)

11. *Sufficient conditions for a problem of Mayer with variable end-points*, by Dr. M. R. Hestenes. (Abstract No. 38-5-135.)

12. *A new method for finding the numerical sum of an infinite series*, by Professor C. C. Camp. (Abstract No. 38-3-77-t.)

13. *Summation factors for double series*, by Professor W. H. Durfee. (Abstract No. 38-5-136-t.)

14. *On the nature of the solutions of certain types of integro-differential equations*, by Mr. Harry Matison. (Abstract No. 38-5-137-t.)

15. *Contribution to the theory of analytic functions in abstract spaces.* Paper II, by Mr. R. S. Martin. (Abstract No. 38-5-138-t.)

16. *On the trigonometric developments of certain doubly periodic functions of the second kind.* by Professor M. A. Basoco. (Abstract No. 38-5-139-t.)

General Session, Saturday morning.

17. *Surfaces and curvilinear congruences*, by Professor E. P. Lane. (Abstract No. 38-3-70.)

18. *A geometrical determination of the canonical quadric of Wilczynski*, by Professor E. B. Stouffer. (Abstract No. 38–3–67–*t*.)

19. *A classification of quadrics in affine n-space by means of arithmetic invariants*, by Dr. R. S. Burington. (Abstract No. 38–3–72.)

20. *Concerning the theory of systems of linear inequalities*, by Dr. I. J. Schoenberg. (Abstract No. 38–5–140.)

21. *On primitive groups containing circular permutations of degree p^α or $2p^\alpha$*, by Professor W. A. Manning. (Abstract No. 38–5–141.)

22. *A construction of non-cyclic normal division algebras*, by Professor A. A. Albert. (Abstract No. 38–3–73.)

23. *Linear associative algebras of infinite order whose elements satisfy finite algebraic equations*, by Professor H. H. Conwell. (Abstract No. 37–11–402.)

24. *Quadratic cycles*, by Professor J. S. Turner. (Abstract No. 38–5–142.)

25. *Subvarieties of a field*, by Mr. C. R. Worth. (Abstract No. 38–5–143.)

26. *Analytic theory of singular difference equations*, by Professor G. D. Birkhoff and Dr. W. J. Trjitzinsky. (Abstract No. 38–5–144.)

27. *Note on the solution of normal systems of linear differential equations with constant coefficients*, by Dr. Walter Bartky and Professor R. W. Barnard. (Abstract No. 38–5–145.)

28. *On the second variation of the area-integral*, by Professor Tibor Radó. (Abstract No. 38–5–146.)

29. *Sketch of an important solvable problem in formal modular covariants*. Preliminary report, by Professor O. E. Glenn. (Abstract No. 38–5–147–*t*.)

30. *On the contact of two space curves*, by Professor E. B. Stouffer. (Abstract No. 38–3–71–*t*.)

31. *The new Einstein geometry and some of its extensions*, by Professor A. D. Michal and Mr. J. L. Botsford. (Abstract No. 38–5–148–*t*.)

32. *A determination of all normal division algebras over an*

algebraic number field, by Professor A. A. Albert and Professor Helmut Hasse. (Abstract No. 38–3–68–*t.*)

33. *On normal simple algebras,* by Professor A. A. Albert. (Abstract No. 38–3–69–*t.*)

34. *Canonical binary trilinear forms,* by Mr. Rufus Oldenburger. (Abstract No. 38–3–76–*t.*)

35. *Further generalizations of certain classes of extreme numbers relative to certain symmetric equations in n reciprocals,* by Professor H. A. Simmons. (Abstract No. 38–5–149–*t.*)

36. *Non-absolutely convergent integrals with respect to a function of bounded variation,* by Professor R. L. Jeffery. (Abstract No. 38–5–150–*t.*)

37. *The variable end point problem of the calculus of variations including a generalization of the classical Jacobi conditions,* by Dr. A. E. Currier. (Abstract No. 38–5–151–*t.*)

<div align="right">M. H. INGRAHAM
Associate Secretary</div>