#### THE APRIL MEETING IN CHICAGO

The two hundred eightieth regular meeting of the Society was held at the University of Chicago on Friday and Saturday, April 18–19, 1930. About one hundred fifty persons attended the meeting, among whom were the following one hundred eighteen members of the Society, the largest number of members ever attending a meeting in Chicago:

Axen, W. L. Ayres, R. W. Babcock, Bardell, Barnard, Barron, Bartky, Baten, Beenken, Theodore Bennett, G. A. Bliss, Blumberg, Bowles, Boyce, O. E. Brown, L. H. Bunyan, R. D. Carmichael, Coble, Coe, A. H. Copeland, Copp, H. B. Curtis, Curtiss, Dancer, Dickson, Doak, Duren, Dresden, Earl, Edington, Emch, Escott, H. P. Evans, Everett, Feltges, Finan, Focke, Georges, J. D. Grant, L. M. Graves, Griffiths, V. G. Grove, W. L. Hart, Hartung, Hildebrandt, Hodge, Charles Hopkins, J. C. Hughes, Ingraham, Dunham Jackson, W. S. Kimball, Kinney, Krathwohl, E. P. Lane, Langer, LaPaz, Larsen, Latimer, LeStourgeon, Harry Levy, Logsdon, Lunn, McShane, Mac-Duffee, MacMillan, Maier, March, T. E. Mason, B. I. Miller, E. H. Moore, Max Morris, E. J. Moulton, Musselman, Nyswander, E. J. Olson, H. L. Olson, Oppenheim, Palmer, Parkinson, Pennell, Pepper, O. J. Peterson, Pixley, Plant, Powell, Irene Price, Rainich, M. S. Rees, W. T. Reid, D. P. Richardson, H. L. Rietz, Ross, Roth, Rouse, Rowland, Sanger, Schottenfels, Skinner, Slaught, Sokolnikoff, Sparks, Speeker, Stafford, Swingle, Thielman, Trump, Vass, Walton, L. E. Ward, Warren Weaver, Wegner, M. J. Weiss, Wiley, K. P. Williams, Frederick Wood, F. E. Wood, Roscoe Woods, Wyant.

On Friday afternoon Professor Henry Blumberg gave a symposium address on *Methods in point sets and the theory of real functions*. Professor Bliss, who presided at this session, expressed the thanks of those present to the speaker.

On Friday evening members and their guests attended a dinner in the Hotel Windermere West. Professor R. D. Carmichael was toastmaster. He called upon Professor Hildebrandt as winner of the last Chauvenet prize. Dean Focke spoke on the coming annual meeting of the Society in Cleveland, and Professor Dresden brought the greetings of the Eastern group to this meeting. The last speaker, Professor Moore, described the development of General Analysis. One hundred eight persons attended this dinner.

The Council met on Friday afternoon.

It was announced that the following twelve persons were elected to membership:

Mr. Harold Maile Bacon, Los Angeles;

Mr. Roberts Cozart Bullock, University of North Carolina;

Mr. Laurens Earle Bush, University of North Carolina;

Mr. Stewart Scott Cairns, Yale University;

Mr. Edward Alexander Cameron, University of North Carolina;

Mr. Warren Randolph Church, University of Pennsylvania;

Dr. Gordon Pall, California Institute of Technology;

Mr. Oldrich Pokorny, University of Prague;

Dr. Robin Robinson, Dartmouth College;

Mr. James Jerry Slader, Jr., University of North Carolina.

As nominee of the University of Pennsylvania:

Mr. John Livezey Vanderslice;

As nominee of Allyn and Bacon:

Mr. Samuel Borofsky.

Under the reciprocity arrangement with the London Mathematical Society, the following three persons have become members of the Society:

Mr. Edward Travers Dixon, Cambridge;

Dr. Raghunath Purushottam Paranjpye, Calcutta;

Mr. Colin Macdonald Ross, Cambridge.

Twenty-two new applications were received by the Council.

The following appointments by the president were announced: to represent the Society at the dedication of the new campus and buildings of the University of California at Los Angeles, March 27–28, 1930, Professor E. T. Bell; to represent the Society at the Semi-Centennial Celebration of the Case School and the inauguration of William Elgin Wickenden as President of the Faculty, April 11, 1930, Professor B. F. Yanney; to represent the Society at the inauguration of Homer LeRoy Shantz as President of the University of Arizona, April 24, 1930, Professor H. B. Leonard.

Upon recommendation of the Committee on the Visiting Lecturership, Professor Wilhelm Blaschke of the University of Hamburg was appointed as Visiting Lecturer for the academic year 1930–31.

The Council received with thanks an invitation received from the College of William and Mary to hold the summer meeting of 1932 at Williamsburg. The dates of the spring meeting at Chicago for 1931 were fixed for April 3, 4.

The president was authorized and requested to appoint a committee to plan a symposium at the meeting in Chicago in April 1931. He later appointed Professors R. D. Carmichael (Chairman), V. G. Grove, and M. H. Ingraham.

Minor changes in the by-laws were recommended to the Society for action at the next meeting.

On Friday morning Professor H. L. Rietz presided at the general session, Vice-President Lane at the section on Geometry, and Professor E. J. Moulton at the section on Analysis. Professor G. A. Bliss presided at the symposium on Friday afternoon, and Professor Coble at the Saturday morning session. The papers whose abstract numbers are followed by the letter t were read by title. Mr. Mendel was introduced by Professor E. P. Lane, Mr. Starcher by Professor R. D. Carmichael, Mr. Miller by Professor R. L. Wilder, and Mr. Munro by Professor J. A. Nyswander.

## General Session, Friday morning.

- 1. Point set theory applied to the random selection of the digits of an admissible number, by Professor A. H. Copeland. (Abstract No. 36-5-254.)
- 2. The discriminant matrix of a semi-simple algebra, by Professor C. C. MacDuffee. (Abstract No. 36-5-255.)
- 3. Integral surfaces of triads of partial differential equations of the third order, by Professor E. P. Lane. (Abstract No. 36-3-170.)
- 4. Unification of force and matter components, by Professor G. Y. Rainich. (Abstract No. 36-3-195.)
- 5. On the asymptotic solutions of ordinary differential equations, with an application to the Bessel functions of large order, by Professor R. E. Langer. (Abstract No. 36-3-201.)

# Section of Geometry and Point Sets, Friday morning.

- 6. On the rational plane quintic curve with three cusps, by Professor O. J. Peterson. (Abstract No. 36-3-202.)
- 7. The dimensionality of a certain linear space in the projective differential geometry of a variety in hyperspace, by Mr. C. W. Mendel. (Abstract No. 36-3-197.)

- 8. A new characterization of the surface of Veronese, by Mr. C. W. Mendel. (Abstract No. 36-5-256-t.)
- 9. On algebraic surfaces which are invariant in a certain class of finite collineation groups, by Professor Arnold Emch. (Abstract No. 36-3-198.)
- 10. A generalization of the Scherrer fixed-point theorem, by Professor W. L. Ayres. (Abstract No. 36-5-257.)
- 11. A generalization of biconnex sets, by Dr. P. M. Swingle. (Abstract No. 36-5-258.)
- 12. Hypergeodesic mapping of a surface on a plane, by Professor E. P. Lane. (Abstract No. 36-5-259-t.)

## Section of Analysis, Friday morning.

- 13. A characteristic normal form for the Euler equations of regular problems of the calculus of variations with prescribed transversality conditions, by Dr. Lincoln LaPaz. (Abstract No. 36-5-260.)
- 14. A generalization of Fourier series, by Mr. W. O. Pennell. (Abstract No. 36-3-199.)
- 15. Expansion problems associated with a system of integral equations, by Dr. W. T. Reid (National Research Fellow). (Abstract No. 36-5-261.)
- 16. On solution of the torsion problem for a polygon with reentrant angles, by Mr. I. S. Sokolnikoff. (Abstract No. 36-5-262.)
- 17. Elementary properties of the  $t_{\nu}$ -functions, by Dr. Wilhelm Maier. (Abstract No. 36-5-263.)
- 18. *Groups of permutable functions*, by Dr. L. M. Blumenthal. (Abstract No. 36–3–200-*t*.)
- 19. A solution of a simple functional equation as a basis for readily obtaining the theory of elliptic functions, by Mr. G. W. Starcher. (Abstract No. 36–3–203–t.)

### General Session, Saturday morning.

- 20. The constants of the disturbing function, by Professor K. P. Williams. (Abstract No. 36–5–264–t.)
- 21. Concerning subsets of a continuous curve S which lie on an arc of S, by Mr. E. W. Miller. (Abstract No. 36-5-265.)
- 22. On canonical forms of differential equations, by Professor V. G. Grove. (Abstract No. 36-5-266.)

- 23. A theorem on linear connections, by Professor Harry Levy. (Abstract No. 36–5–267.)
- 24. On curves of zero curvatures in Riemann spaces, by Professor Harry Levy. (Abstract No. 36-5-268-t.)
- 25. On matrices conjugate with respect to the minimum equation, by Miss E. T. Stafford. (Abstract No. 36-5-269.)
- 26. A determination of the integral domains of the complete rational matrix algebra of order 4, by Mr. E. J. Finan. (Abstract No. 36-5-270.)
- 27. Amicable numbers, by Mr. E. B. Escott. (Abstract No. 36-5-271.)
- 28. The probable error of certain functions of the errors, by Dr. W. D. Baten. (Abstract No. 36-5-272.)
- 29. Systems of partial differential equations with constant coefficients, by Mr. G. C. Munro. (Abstract No. 36-5-273.)
- 30. An envelope theorem and necessary conditions for a problem of Mayer with one variable end point, by Dr. M. G. Boyce. (Abstract No. 36-5-274.)
- 31. Researches in the theory of numbers, by Professor L. E. Dickson. (Abstract No. 36-5-275.)
- 32. On certain universal and zero indefinite ternary quadratic forms, by Mr. A. E. Ross. (Abstract No. 36-5-276-t.)
- 33. On universal indefinite quaternary quadratic forms  $\phi = f(x, y, z) + \alpha w^2$ , by Mr. A. E. Ross. (Abstract No. 36-5-277-t.)

M. H. INGRAHAM,

Associate Secretary