

**BULLETIN
OF THE
AMERICAN MATHEMATICAL SOCIETY**

THE OCTOBER MEETING IN NEW YORK

The three hundred sixty-second meeting of the American Mathematical Society was held at Columbia University on Saturday, October 28, 1939. The attendance included the following one hundred seventy-nine members of the Society:

H. W. Alexander, C. B. Allendoerfer, Warren Ambrose, R. L. Anderson, R. G. Archibald, L. A. Aroian, R. P. Bailey, M. F. Becker, D. L. Bernstein, A. C. Berry, E. E. Betz, J. H. Blau, Salomon Bochner, Samuel Borofsky, Joseph Bowden, C. B. Boyer, A. B. Brown, J. H. Bushey, Jewell H. Bushey, S. S. Cairns, A. D. Campbell, Claude Chevalley, Alonzo Church, G. A. Coon, T. F. Cope, Byron Cosby, Richard Courant, A. P. Cowgill, H. B. Curry, J. H. Curtiss, M. D. Darkow, Norman Davidowitz, M. M. Day, R. P. Dilworth, W. J. Dixon, Jesse Douglas, Arnold Dresden, F. G. Dressel, Nelson Dunford, W. D. Duthie, J. E. Eaton, M. L. Elveback, Paul Erdős, Aaron Fialkow, W. B. Fite, Edward Fleisher, W. W. Flexner, M. C. Foster, R. M. Foster, J. S. Frame, K. O. Friedrichs, G. N. Garrison, Abe Gelbart, J. J. Gergen, B. P. Gill, Michael Goldberg, Saul Gorn, C. H. Graves, M. C. Gray, S. L. Greitzer, H. M. Griffin, M. B. Haberketle, D. W. Hall, Marshall Hall, N. A. Hall, P. R. Halmos, J. A. Hamilton, D. C. Harkin, Philip Hartman, Maximilian Herzberger, E. H. C. Hildebrandt, T. H. Hildebrandt, L. S. Hill, Einar Hille, Banesh Hoffmann, T. R. Holcroft, Harold Hotelling, S. E. Hotelling, E. M. Hull, Witold Hurewicz, R. P. Isaacs, Nathan Jacobson, S. A. Joffe, R. A. Johnson, Wilfred Kaplan, L. S. Kennison, S. C. Kleene, E. R. Kochin, B. O. Koopman, Jack Laderman, A. W. Landers, M. K. Landers, Madeline Levin, Marie Litzinger, E. R. Lorch, A. N. Lowan, N. H. McCoy, Brockway McMillan, L. A. MacColl, Saunders MacLane, H. F. MacNeish, A. J. Maria, W. T. Martin, Walther Mayer, H. L. Mintzer, Deane Montgomery, D. C. Murdoch, F. J. Murray, Tadasi Nakayama, C. A. Nelson, C. O. Oakley, Rufus Oldenburger, J. M. H. Olmsted, Oystein Ore, F. W. Owens, H. B. Owens, J. C. Oxtoby, R. S. Phillips, E. L. Post, Walter Prenowitz, J. F. Randolph, H. W. Raudenbush, H. W. Reddick, C. J. Rees, M. S. Rees, H. J. Riblet, Moses Richardson, J. F. Ritt, H. E. Robbins, J. H. Roberts, S. L. Robinson, Benjamin Rosenbaum, J. E. Rosenthal, J. B. Rosser, Arthur Sard, Abraham Schwartz, Hyman Serbin, Stephan Serghiesco, I. M. Sheffer, L. W. Sheridan, Seymour Sherman, Max Shiffman, J. A. Shohat, L. P. Sicheloff, L. G. Simons, James Singer, Abraham Sinkov, L. L. Smail, M. F. Smiley, R. C. Stephens, Wolfgang Sternberg, S. W. Stewart, R. R. Stoll, M. H. Stone, W. C. Strodt, M. M. Sullivan, J. D. Tamarkin, J. H. Taylor, E. W. Titt, C. B. Tompkins, A. W. Tucker, J. W. Tukey, Annita Tuller, Henry Wallman, J. L. Walsh, J. V. Wehausen, Louis Weisner, M. E. Wells, J. S. de Wet, A. H. Wheeler, A. P. Wheeler, O. L. Wheeler, A. L. Whiteman, S. S. Wilks, W. A. Wilson, H. P. Wirth, Audrey Wishard, H. N. Wright, Leo Zippin.

The meeting opened Saturday morning with two sessions: Analysis

and Geometry, Professor J. H. Bushey presiding; and Algebra and Topology, Professor J. S. Frame presiding. At the opening of the afternoon session, at which Vice President J. F. Ritt presided, the members of the Society voted, on recommendation of the Council, to adopt the following amendment to the by-laws as Article 2, Section 3:

Section 3. The Board of Trustees shall have the power to appoint a manager and such assistants and agents as may be necessary or convenient to facilitate the conduct of the affairs of the Society, and to fix the terms and conditions of their employment. The Board may delegate to the officers of the Society duties and powers normally inhering in their respective corporate offices, subject to supervision by the Board. The Board of Trustees may appoint committees to facilitate the conduct of the business of the Society and delegate to such committees such powers as may be necessary or convenient for the proper exercise of those powers. Agents appointed, or members of committees designated, by the Board of Trustees need not be members of the Board.

Nothing herein contained shall be construed to empower the Board of Trustees to divest itself of responsibility for, or legal control of, the investments, properties and contracts of the Society.

After the short business meeting, Professor J. J. Gergen gave an address entitled *Double Fourier series*. The general session was followed by two sectional sections: Analysis, Professor Anna Pell Wheeler presiding; and Algebra and Geometry, Professor Saunders MacLane presiding.

Titles and cross references to the abstracts of the papers read follow below. Papers whose abstract numbers are followed by the letter *t* were read by title. The papers numbered 1 to 9 were read before the section for Analysis and Geometry; those numbered 10 to 18 before the section for Algebra and Topology; those numbered 19 to 23 before the section for Analysis; those numbered 24 to 28 before the section for Algebra and Geometry; and papers numbered 29 to 50 were read by title. Paper 16 was read by Professor MacLane, paper 17 by Dr. Zippin, paper 20 by Dr. Maria, and paper 24 by Dr. Becker. Dr. S. A. Jennings was introduced by Professor Oystein Ore and Dr. Alfred Brauer by Professor Hermann Weyl.

1. L. A. Aroian: *New continued fractions for the incomplete beta function*. (Abstract 45-11-408.)
2. Aaron Fialkow: *The conformal theory of curves*. (Abstract 45-11-415.)
3. Abraham Schwartz: *The Gauss-Codazzi-Ricci equations in Riemannian manifolds*. (Abstract 45-9-374.)

4. M. C. Foster: *Note on autopolar curves*. (Abstract 45-11-416.)
5. A. H. Wheeler: *A one-sided polyhedron having one hundred twenty faces*. (Abstract 45-11-439.)
6. W. T. Martin: *On a minimal problem in the theory of analytic functions of several variables*. (Abstract 45-11-425.)
7. Rufus Oldenburger: *Exponent trajectories in symbolic dynamics*. (Abstract 45-11-428.)
8. Wolfgang Sternberg: *The general limit theorem in the theory of probability*. (Abstract 45-9-380.)
9. C. B. Allendoerfer: *The Euler number of an imbedded Riemann manifold*. (Abstract 45-11-406.)
10. J. E. Eaton: *Theory of cogroups*. (Abstract 45-9-310.)
11. S. A. Jennings: *The structure of the group ring of a p -group over a modular field*. (Abstract 45-11-422.)
12. Benjamin Rosenbaum: *Ideals of a quadratic field in canonical form*. (Abstract 45-11-434.)
13. D. C. Murdoch: *Further theory of quasi-groups*. (Abstract 45-11-427.)
14. J. H. Roberts: *A theorem on two-to-one transformations*. (Abstract 45-11-433.)
15. A. W. Tucker: *The algebraic structure of complexes*. Preliminary report. (Abstract 45-11-437.)
16. V. W. Adkisson and Saunders MacLane: *On extending maps of plane Peano continua*. (Abstract 45-11-404.)
17. Deane Montgomery and Leo Zippin: *Topological group foundations of "rigid" space geometries*. (Abstract 45-11-402.)
18. H. J. Riblet: *Symmetric differential expressions and applications*. (Abstract 45-11-432.)
19. C. J. Rees: *Differential equation of elliptic orthogonal polynomials*. (Abstract 45-11-431.)
20. T. S. George and A. J. Maria: *Equilibrium point of Green's function for an n -dimensional spherical shell*. (Abstract 45-11-419.)
21. Einar Hille: *Contributions to the theory of Hermitian series*. II. *The representation problem*. (Abstract 46-1-456.)
22. Abe Gelbart: *On functions of two complex variables given by power series expansion*. (Abstract 45-11-418.)
23. J. F. Randolph: *Metric separability*. (Abstract 45-11-430.)
24. Miriam F. Becker and Saunders MacLane: *The minimum number of generators for inseparable algebraic extensions*. (Abstract 45-9-300.)
25. Alfred Brauer: *On the non-existence of the euclidean algorithm in certain quadratic number fields*. (Abstract 45-11-411.)

26. R. P. Dilworth: *The arithmetical theory of Birkhoff lattices*. (Abstract 45-11-413.)
27. Walter Prenowitz: *Projective geometry as a group-like system*. (Abstract 45-11-429.)
28. Michael Goldberg: *New five-bar and six-bar linkages in three dimensions*. (Abstract 45-11-315.)
29. R. P. Agnew: *On continuity and periodicity of measurable functions*. (Abstract 45-11-405-t.)
30. R. P. Agnew: *On rearrangements of series*. (Abstract 46-1-441-t.)
31. Salomon Bochner: *Harmonic surfaces in Riemann metric*. (Abstract 45-11-410-t.)
32. S. S. Cairns: *Homeomorphisms between topological manifolds and analytic manifolds*. (Abstract 45-9-306-t.)
33. J. J. DeCicco: *The circular group in an infinite plane of the Kasner space*. (Abstract 45-11-398-t.)
34. R. P. Dilworth, *Lattices with unique irreducible decompositions*. (Abstract 45-11-412-t.)
35. P. W. Gilbert: *Two-to-one transformations on acyclic continuous curves*. (Abstract 45-11-420-t.)
36. Nathan Jacobson: *A note on hermitian forms*. (Abstract 45-11-421-t.)
37. Edward Kasner and J. J. DeCicco: *Characterization of the conformal group by horn angles of second order*. (Abstract 45-11-400-t.)
38. J. L. Doob and Warren Ambrose: *On continuous stochastic processes*. (Abstract 45-11-414-t.)
39. E. S. Kennedy: *Exponential analogues of the Lambert series*. (Abstract 45-11-423-t.)
40. A. N. Lowan and Jack Laderman: *On the distribution of errors in n th tabular differences*. (Abstract 45-9-292-t.)
41. A. N. Lowan: *On the problem of wave-motion for the wedge of an angle*. (Abstract 45-11-291-t.)
42. Deane Montgomery and Leo Zippin: *Note on rotation-group of the two-sphere*. (Abstract 45-11-426-t.)
43. G. E. Raynor: *On Serret's integral formula*. (Abstract 46-1-471-t.)
44. O. F. G. Schilling: *Regular normal extensions over complete fields*. (Abstract 45-7-284-t.)
45. A. R. Schweitzer: *On a classification of "configurational" sets of ordered dyads*. (Abstract 45-9-375-t.)
46. A. R. Schweitzer: *On a classification of systems of "configurational" sets of ordered dyads*. (Abstract 45-9-376-t.)

47. W. T. Scott and H. S. Wall: *A convergence theorem for continued fractions*. III. (Abstract 45-11-435-t.)

48. W. E. Sewell: *Continuity and degree of approximation by rational functions*. (Abstract 45-7-286-t.)

49. W. E. Sewell: *Continuity and integral approximation to an analytic function by polynomials in z and $1/z$* . (Abstract 45-7-287-t.)

50. W. E. Sewell: *The derivative of a polynomial on further arcs of the complex domain*. (Abstract 45-7-288-t.)

T. R. HOLLCROFT,
Associate Secretary

THE NOVEMBER MEETING IN COLUMBIA

The three hundred sixty-third meeting of the Society was held at the University of Missouri, Columbia, Missouri, on Friday and Saturday, December 1-2, 1939, in connection with the centennial celebration of the University of Missouri. Seventy-three persons registered including the following forty-nine members of the Society:

V. W. Adkisson, H. A. Arnold, J. V. Atanasoff, W. L. Ayres, R. W. Babcock, Wealthy Babcock, P. O. Bell, Herman Betz, F. L. Black, L. M. Blumenthal, C. C. Camp, H. H. Campaigne, E. W. Chittenden, J. S. Creane, R. D. Daugherty, G. M. Ewing, B. F. Finkel, L. R. Ford, W. L. Graves, O. H. Hamilton, N. A. Haynes, J. J. L. Hinrichsen, H. E. Jordan, I. F. Keeler, J. R. F. Kent, J. W. Kitchens, J. V. McKelvey, R. J. Michel, U. G. Mitchell, G. C. Munro, G. D. Nichols, E. N. Oberg, O. J. Peterson, G. B. Price, W. C. Randels, Robert Rawhouser, P. R. Rider, E. H. Rothe, D. T. Sigley, E. R. Smith, G. W. Smith, Julia Spalding, E. B. Stouffer, W. T. Stratton, C. B. Tucker, G. E. Wahlin, L. E. Ward, W. D. A. Westfall, J. J. Wheeler.

The meeting opened Friday afternoon with a session devoted to short papers, followed by an address by Professor L. R. Ford of Armour Institute of Technology entitled *Projective transformations in two complex variables*. On Saturday morning Professor E. W. Chittenden of the University of Iowa delivered an address entitled *Topological functions*. These two addresses were given under the joint auspices of the Society and the University of Missouri. The meeting closed Saturday morning with a second session of short papers.

On Friday evening a dinner was held at the Tiger Hotel with seventy-nine persons attending. Professor W. D. A. Westfall presided at the dinner and Dean Henry Bent of the Graduate School of the University of Missouri welcomed the visitors on behalf of the host institution. Professor L. R. Ford gave reminiscences of student days at the University of Missouri. Professor W. L. Ayres spoke of the founding of a new mathematical journal, MATHEMATICAL REVIEWS.