THE APRIL MEETING IN NEW YORK

The two hundred seventy-ninth meeting of the American Mathematical Society was held at Columbia University, on Friday and Saturday, April 18–19, 1930. The attendance included the following one hundred twenty-four members of the Society:

Adshead, Agnew, A. A. Albert, R. L. Anderson, R. G. Archibald, J. W. Arnold, Ball, Borofsky, Brinkmann, A. B. Brown, B. L. Brown, Carlitz, Alonzo Church, J. A. Clark, L. W. Cohen, Cooley, Cope, C. C. Craig, Cramblet, Curry, Darkow, H. T. Davis, Dehn, Demos, Eisenhart, Farnum, Feld, D. A. Flanders, M. C. Foster, Frink, Fry, Gale, C. A. Garabedian, H. L. Garabedian, Gill, Gordon, M. C. Graustein, W. C. Graustein, C. H. Graves, Gray, Gronwall, C. C. Grove, Guggenbühl, E. S. Hammond, Hille, Himwich, Hofmann, Hollcroft, R. L. Jackson, Jeffery, Joffe, Kasner, Kholodovsky, B. F. Kimball, Kline, Mark Kormes, Kramer, Lamson, Langman, Lefschetz, Lehr, Libman, Littauer, N. H. McCoy, MacColl, F. H. Miller, H. H. Mitchell, Molina, Monsky, T. W. Moore, Marston Morse, Mullins, C. A. Nelson, Newman, F. S. Nowlan, Ore, F. W. Owens, H. B. Owens, Pell-Wheeler, Pfeiffer, Phalen, C. S. Porter, Post, Raudenbush, Reddick, Ritt, J. H. Roberts, Robin Robinson, Romig, Ruger, Schelkunoff, Seely, Serghiesco, I. M. Sheffer, Shover, Siceloff, Simons, Smail, P. A. Smith, Sosnow, Struik, Tamarkin, Tartler, J. H. Taylor, T. Y. Thomas, Tuller, Vanderslice, Veblen, Wahlert, Weida, Weinstein, Weisner, M. E. Wells, Wexler, Whitehead, Whittemore, Widder, C. E. Wilder, F. G. Williams, Winters, Woodard, J. W. Young, Margaret M. Young, Zippin.

The sessions on Friday afternoon and Saturday morning were devoted to a symposium on differential geometry. The following papers were presented: Friday, April 18, Differential geometry in the large, by Professor D. J. Struik, and Invariant methods in classical differential geometry, by Professor W. C. Graustein; Saturday, April 19, Space structure as a boundary-value problem, by Professor T. Y. Thomas, and On the general concepts of differential geometry, by Professor Oswald Veblen. On Friday afternoon, Professor Kasner presided during Professor Struik's paper, and Professor Eisenhart during Professor Graustein's; Professor J. W. Young presided on Saturday morning.

On Friday morning the Society met in two sections for the presentation of short papers. The titles and cross references to the abstracts of the papers read at these sessions follow below; the papers whose abstract numbers are followed by the letter t were read by title. The papers numbered 1 to 19 were read before the section of Analysis and Algebra, Dr. Fry presiding, and those numbered 20–32 before the section of Geometry and Analysis Situs, Vice-President Lefschetz presiding, relieved by Professor Hollcroft. Mr. Cady was introduced by Professor Brinkmann, Mr. Howitt by Professor Struik, and Mr. Hull by Professor Nowlan.

- 1. Sets of integral elements of certain rational Dickson algebras, by Professor F. S. Nowlan and Mr. Ralph Hull. (Abstract No. 36-5-222.)
- 2. On direct products, cyclic division algebras, and pure Riemann matrices, by Dr. A. A. Albert. (Abstract No. 36-5-223.)
- 3. On Galois fields of certain types, by Mr. Leonard Carlitz. (Abstract No. 36-5-224.)
- 4. On real quadratic fields, by Mr. Charles Wexler. (Abstract No. 36-5-225.)
- 5. The uniform approximation of a summable function by means of step-functions, by Professor R. L. Jeffery. (Abstract No. 36-5-226.)
- 6. Note on point transformations and non-analytic functions, by Professor I. M. Sheffer. (Abstract No. 36-5-227.)
- 7. The homogeneous case of the linear differential equation of infinite order with polynomial coefficients, by Professor H. T. Davis. (Abstract No. 36-5-228.)
- 8. An extension of the classical algebra and calculus, by Mr. W. M. Cady. (Abstract No. 36-5-229.)
- 9. The behavior of bounds and oscillations of sequences of functions under regular transformations, by Mr. R. P. Agnew. (Abstract No. 36-5-230.)
- 10. On a class of finite sums, by Mr. Leonard Carlitz. (Abstract No. 36-5-231.)
- 11. The structure of matrices with any normal division algebra of multiplications, by Dr. A. A. Albert. (Abstract No. 36-5-232-t.)

- 12. Note on central motions, by Mr. Hassler Whitney. (Abstract No. 36-5-233-t.)
- 13. A proof of the generalized second limit-theorem in the theory of probability, by Professor Maurice Fréchet and Dr. J. A. Shohat. (Abstract No. 36-5-234-t.)
- 14. The eliminant in electric circuit theory, by Mr. Nathan Howitt. (Abstract No. 36-5-235.)
- 15. Manifolds of functions determined by systems of algebraic differential equations, by Professor J. F. Ritt. (Abstract No. 36-5-236.)
- 16. On uniform summability of sequences of continuous functions, by Mr. R. P. Agnew. (Abstract No. 36-5-237-t.)
- 17. On the relation between certain methods of summability, by Mr. H. L. Garabedian. (Abstract No. 36-5-238-t.)
- 18. Geometry of element transformations, by Professor Edward Kasner. (Abstract No. 36-5-239.)
- 19. The representation of projective spaces, by Mr. J. H. C. Whitehead. (Abstract No. 36-5-240.)
- 20. Note on the Gauss-Bonnet formula of differential geometry, by Professor B. F. Kimball. (Abstract No. 36-5-241.)
- 21. Theorems on rotated and inverted congruences, by Professor Malcolm Foster. (Abstract No. 36-5-242.)
- 22. Degenerate algebraic manifolds, by Professor T. R. Hollcroft. (Abstract No. 36-5-243.)
- 23. Coalescence of parts of a complex, by Dr. A. B. Brown (National Research Fellow). (Abstract No. 36-5-244.)
- 24. A note concerning cactoids, by Dr. J. H. Roberts (National Research Fellow). (Abstract No. 36–5–245.)
- 25. Sets strongly homeomorphic with the interior of a plane circle, by Professor D. W. Woodard. (Abstract No. 36–5-246.)
- 26. Conical accessibility and the topologic sphere, by Dr. Leo Zippin. (Abstract No. 36-5-247.)
- 27. Cyclicly connected continuous curves whose complementary domain boundaries are homeomorphic, preserving branch points, by Mr. V. W. Adkisson. (Abstract No. 36-5-248-t.)
- 28. Note on components and constituents of open sets, by Professor R. G. Putnam. (Abstract No. 36-5-249-t.)

- 29. Potentially regular point sets, by Professor G. T. Whyburn, (Abstract No. 36-5-250-t.)
- 30. Concerning the structure of regular curves, by Professor G. T. Whyburn. (Abstract No. 36-5-251-t.)
- 31. Concerning irreducible ϵ -separations, locally connected spaces, and accessible plane continua, by Professor G. T. Whyburn. (Abstract No. 36-5-252-t.)
- 32. Transformations of compact spaces and their fixed points, by Professor Solomon Lefschetz. (Abstract No. 36-5-253.)

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Associate Secretary