

## NOTES

The American Mathematical Society is a beneficiary under the will of the late Miss Marion Reilly, of Bryn Mawr College, as residuary legatee of a trust fund.

The opening number of volume 31 of the Transactions of this Society (January, 1929) contains the following papers: *The boundary problem associated with a differential equation in which the coefficient of the parameter changes sign*, by R. E. Langer; *Triple and multiple systems, their geometric configurations and groups*, by A. Emch; *On the expansion of analytic functions of the complex variable in generalized Taylor's series*, by D. V. Widder; *Note on the expansion of analytic functions in series of polynomials and in series of other analytic functions*, by J. L. Walsh; *A general problem of minimizing an integral with discontinuous integrand*, by C. F. Roos; *An introduction to the theory of ideals in linear associative algebras*, by C. C. MacDuffee; *On the Padé approximants associated with the continued fraction and series of Stieltjes*, by H. S. Wall; *On curvilinear congruences*, by C. E. Weatherburn; *The multinomial solid and the chi test*, by B. H. Camp; *The singular points of analytic space-curves*, by A. Ranum; *Universal quadratic forms*, by L. E. Dickson; *Boundary value problems for potentials of a single layer*, by E. R. C. Miles; *On a generalization of the associative law*, by A. Suschkewitsch.

The opening number of volume 51 of the American Journal of Mathematics contains: *Discontinuous boundary value problems of the first kind for Poisson's equation*, by G. C. Evans; *On irreducible cross-cuts of plane simply connected regions*, by W. A. Wilson; *Number of abelian subgroups in every prime power group*, by G. A. Miller; *Finite groups in which conjugate operations are commutative*, by C. Hopkins; *Covariant conditions for multiple roots of a binary form*, by L. T. Moore and J. I. Tracey; *On certain finitely solvable equations between arithmetical functions*, by E. T. Bell; *On the number of representations of integers by certain ternary quadratic forms*, by J. V. Uspensky; *Representation of integers in the form  $x^2 + 2y^2 + 3z^2 + 6w^2$* , by L. W. Griffiths; *Normal ternary continued fraction expansions for cubic irrationalities*, by P. H. Daus; *Triads of plane curves*, by A. R. Jerbert; *The symbolic development of the disturbing function*, by K. P. Williams; *An extension of Maschke's symbolism*, by N. L. Anderson; *On the approximate solution of Fredholm's homogeneous integral equation*, by R. B. Adams; *Functions of écart fini*, by H. E. Bray.

The November, 1928, number of the Annals of Mathematics (series 2, volume 29, No. 4) contains: *Concerning the complementary domains of continua*, by G. T. Whyburn; *Fermat's Note XLV*, by C. M. Walsh; *A new derivation of the Lorentz transformation*, by P. Y. Chou; *On  $m$ -dimensional cross-ratios*, by L. Weisner; *Twisted curves classified as to their osculating and quasi-osculating spheres*, by A. Ranum; *On the generalization of the algebra of the theory of numbers. The invariancy of infinite series*, by O. E.

Glenn; *Involutions that belong to a linear class*, by E. T. Browne; *Euclidean invariants of plane algebraic curves*, by L. Weisner; *Non-abelian groups whose groups of isomorphisms are abelian*, by C. Hopkins; *Oscillation theorems for the differential boundary value problems of the fourth order*, by S. A. Janczewsky; *A note on Stieltjes integrals*, by R. N. Haskell; *On motions which satisfy Kepler's first and second laws*, by L. R. Ford.

Professor G. H. Hardy, of Oxford University, who has been lecturing at Princeton University during the first semester of the present academic year on *Chapters in the theory of functions*, lectured at Lehigh University on January 11 on *Hilbert's Mathematical logic*, at the Ohio State University on January 18, 1929, on *The theory of primes*, and at the University of Chicago on January, 21 on *The analytic theory of numbers*. From January 27 to March 15, he was in residence at the California Institute of Technology, giving lectures on *The analytic theory of numbers*. On March 1 and 5 he lectured at the University of California at Los Angeles. Between March 7 and March 12 he delivered the Hitchcock lectures at the University of California at Berkeley. As announced elsewhere, he will speak at the invitation of the program committee at the meeting of this Society in New York City on March 29 on *Modern work in the theory of ordinary trigonometric series*.

Professor Hermann Weyl, of the Zurich Technical School, who has acted as research professor of mathematical physics at Princeton University during the academic year, has been appointed as Visiting Lecturer by the Council of the American Mathematical Society for the year 1928-29. (See this Bulletin, vol. 34, p. 22.) Professor Weyl has already delivered lectures in the Universities of Iowa and Michigan (in December), and at Columbia University (in March); and he will make an extended tour during the month of May, travelling slowly from Princeton westward to California, where he will teach in the Summer Session at the University of California at Berkeley. A detailed schedule of all of his lectures will appear later. As announced elsewhere, he will speak at the invitation of the program committee at the meeting of this Society in New York City on March 30, on *Fournier series and almost periodic functions from the standpoint of the theory of groups*.

Professor Arnold Emch, of the University of Illinois, who has been on leave of absence in Europe during the present academic year, lectured before the Mathematical Colloquium of the University of Zürich on January 28 on the topic *Cremona transformations and algebraic curves and surfaces*.

Professor James Pierpont's address on *Mathematical rigor, past and present* (this Bulletin, vol. 34, pp. 23-53) has been reprinted in the Revista Matemática Hispano-Americana, (2), vol. 3 (1928), Nos. 7-8, under the title *El rigor matemático. Pasado y presente*. The translation is by Alvarez Aguirre.

At the annual meeting of the London Mathematical Society, the following officers were elected: president, Professor E. T. Whittaker; vice-presidents, Mr. R. H. Fowler, Professor E. H. Neville, and Mr. E. C.

Titchmarsh; treasurer, Dr. A. E. Western; librarian, Professor Harold Hilton; secretaries, Professor G. N. Watson and Mr. F. P. White; new members of the Council, Professor Oswald Veblen and Mr. T. L. Wren.

Among the officers elected at the New York meeting of the American Association for the Advancement of Science are the following: president, Professor R. A. Millikan; vice-president of Section A (mathematics), Professor E. T. Bell; Secretary of Section A, Professor C. N. Moore; vice-president of Section K (economic and social sciences), Professor H. L. Rietz; secretary of Section K, Professor C. F. Roos.

Dr. Max Mason, director of the division of natural science of the Rockefeller Institute, and Professor M. I. Pupin, of Columbia University, have been appointed members of the National Research Council's committee to cooperate with the officials of the Chicago World's Fair Centennial Celebration. Mr. F. B. Jewett, vice-president of the American Telephone and Telegraph Company, is chairman of this committee.

Dr. Irving Langmuir, of the General Electric Company, has been elected president of the American Chemical Society.

The Paris Academy of Sciences announces the award of the following prizes for 1928: the Poncelet prize to Gaston Julia, for his mathematical work; the Francœur prize to Szolem Mandelbrojt, for his work in mathematical analysis; the Montyon prize in mechanics to Filippo Burzio, of Turin, for his work in ballistics; the Henri de Parville prize to F. C. Haus, of the Belgian Service Technique de l'Aéronautique, for his *Etude dynamique sur la vrille*; the Valz prize to Georges van Biesbroeck, of the University of Chicago, for his astronomical work; the Janssen medal to William Wright, of the Lick Observatory, for his astronomical work; the Plumey prize to Albert Thuloup, for his memoir entitled *Essai sur la fatigue des tuyaux mince à fibre moyenne plane ou gauche*; the Montyon prize in statistics to Georges Darmois, for his work entitled *Statistique Mathématique*; the Grand Prix for mathematical sciences to Georges Giraud, for his work in partial differential equations; the Vaillant prize to Maurice Fréchet, for his work in abstract sets; the Roux prize to François Divisia, for his work entitled *Economique Rationnelle*; a prize from the Gegner foundation to Maurice Vèzes, for his *Traité de Chimie Physique*; a prize from the Hirn foundation to Maurice Gevrey, for his work in partial differential equations; a prize from the Henri Becquerel foundation to Paul Lévy, for his work in the analysis of functionals.

The Royal Society of London has awarded the following medals: a royal medal to Professor A. S. Eddington, for his contributions to astrophysics; the Sylvester medal to Professor W. H. Young, for his contributions to the theory of functions of a real variable; the Rumford medal to Professor Friedrich Paschen, for his contributions to the knowledge of spectra; the Hughes medal to Maurice de Broglie, for his work on X-ray spectra.

The Buchan prize of the Royal Meteorological Society has been awarded to Dr. Harold Jeffreys, for papers contributed to the Quarterly Journal of

that Society during the years 1924–1927, on cyclones, fluid motions produced by differences of temperature and humidity, dynamics of winds, and related subjects.

The American Mathematical Society has awarded its Bôcher Memorial Prize to Professor J. W. Alexander, of Princeton University, for his memoir entitled *Combinatorial analysis situs*, in volume 28 of the Transactions of this Society. (See the present issue of this Bulletin, p. 162.)

The National Academy of Sciences has awarded its Comstock prize, for the most important research in electricity, magnetism, and radiant energy during the past five years, to C. J. Davissou, of the Bell Telephone Laboratories.

Professor A. H. Compton, of the University of Chicago, has been awarded the gold medal of the Radiological Society of America for his work in X-rays.

The New York Academy of Sciences has awarded its A. Cressy Morrison prize to B. P. Gerasimovic, of the Harvard College Observatory, and D. H. Menzel, of the Lick Observatory, for a thesis on *Subatomic energy and stellar radiation*.

Professor Serge Bernstein has been elected correspondent of the Paris Academy of Sciences, in the section of geometry.

Professor G. D. Birkhoff has been elected correspondent of the Paris Academy of Sciences.

Professor G. Koenigs, of the Sorbonne, has been elected an associate of the Royal Academy of Belgium.

Professor A. Fraenkel, of the University of Kiel, has been appointed head of the mathematical institute of the University of Jerusalem.

Associate Professor Georg Joos has been promoted to a full professorship of theoretical physics at the University of Jena.

Professor Adolf Smekal, of the University of Vienna, has been appointed professor of theoretical physics at the University of Halle.

Dr. F. A. Willers has been appointed professor of mathematics at the School of Mines of Freiberg i. Sa.

The following have been admitted as private docents: Dr. A. Berger, for insurance mathematics, at the University of Vienna; Dr. G. Thomsen, for mathematics, at the University of Hamburg.

Mr. Arthur Berry and Mr. H. W. Richmond have retired from university lecturerships at King's College, Cambridge.

Mr. A. S. Besicovitch has been appointed Cayley lecturer in mathematics at Cambridge University.

Mr. H. S. Ruse has been appointed lecturer in mathematics at the University of Edinburgh.

Assistant Professor Herman Zanstra, of the University of Washington, has been appointed assistant professor of mathematics at the Imperial College, London.

The Institute of Mathematics and Applied Mathematics of the University of Paris, dedicated to the memory of Henri Poincaré, was formally opened on November 1, 1928; Premier Poincaré presided at the ceremonies. Funds for the erection of the building were provided by the Baron Edmond de Rothschild and the General Education Board, the latter subscribing also an endowment for a chair of applied mathematics. See pages 198-200 of this issue.

A memorial building in honor of the late Dean H. B. Fine, to be known as the Henry Burchard Fine Mathematical Hall, will be erected at Princeton University for the use of the departments of mathematics and mathematical physics. It is the gift of T. D. Jones, of the Princeton class of 1876, and his niece, Miss Gwenthalyne Jones.

The Carnegie Foundation has made a grant of \$25,000 to Princeton University for the study of light conditions under which atoms exist.

Dr. P. A. M. Dirac, of St. John's College, Cambridge, will lecture on quantum mechanics at the University of Wisconsin during April and May.

Assistant Professor R. W. Babcock, of the University of Wisconsin, has been appointed as professor and head of the department at De Pauw University, to take effect in September, 1929.

Mr. W. M. Bond has been appointed professor of mathematics at Waynesburg College, Waynesburg, Pa.

Mr. Paul K. Rees, of Texas Technological College, has been appointed assistant professor of mathematics at the University of Mississippi; Mr. Thomas A. Bickerstaff has been appointed to a teaching fellowship at the College.

Professor A. A. Titsworth has retired after forty-two years of service in the mathematical department of Rutgers University.

Adjunct Professor G. T. Whyburn, of the University of Texas, has been appointed assistant professor of mathematics at the Johns Hopkins University, to take effect in September, 1929.

Professor G. H. Bryan, retired, of the University of North Wales, Bangor, died October 13, 1928, at the age of sixty-four.

Dr. J. W. L. Glaisher, F. R. S., senior fellow of Trinity College, Cambridge, died December 7, 1928, at the age of eighty.

Professor T. C. Chamberlin, of the department of geology of the University of Chicago, known for his planetesimal hypothesis, died November 15, 1928, at the age of eighty-five.

The Reverend J. N. Donahue, president of Columbia University, Portland, Ore., died recently.

Dr. Leonard Waldo, astronomer and consulting engineer, died January 25, 1929, at the age of seventy-five.