

NOTES

The April, 1929, number of the Transactions of this Society (volume 31, No. 2) contains the following papers: *A note on closest approximation*, by D. Jackson; *Homogeneous polynomials with a multiplication theorem*, by O. C. Hazlett; *Generalized factorial series*, by T. Fort; *On extending a continuous (1-1) correspondence (second paper)*, H. M. Gehman; *A determination of all normal division algebras in sixteen units*, by A. A. Albert; *Expansions in generalized Appell polynomials, and a class of related linear functional equations*, by I. M. Sheffer; *Systems of infinitely many linear differential equations of infinite order, with constant coefficients*, by I. M. Sheffer; *On general topology and the relation of the properties of the class of all continuous functions to the properties of space*, by E. W. Chittenden; *Properties of functions represented by the Dirichlet series $\sum (a\nu + b)^{-s}$, or by linear combinations of such series*, by J. I. Hutchinson; *Concerning zero-dimensional sets in euclidean space*, by R. L. Wilder; *On the linear partial q -difference equation of general type*, by C. R. Adams; *Les fonctions polygènes comme intégrales d'équations différentielles*, by G. Calugaréano.

The April, 1929, number of the American Journal of Mathematics (volume 51, No. 2) contains: *Singular points of vector fields under general boundary conditions*, by M. Morse; *A complete solution of Laplace's equation by an infinite hypervariable*, by P. W. Ketchum; *Functions with assigned initial values*, by W. J. Trjitzinsky; *The abstract identity of modular systems and ideals*, by D. Harkin; *Concerning the cut points of a continuous curve when the arc curve, AB , contains exactly N independent arcs*, by N. E. Rutt; *A direct treatment of systems of linear differential equations whose coefficients have uniform singularities*, by J. A. Nyswander; *On related difference and differential systems*, by W. M. Whyburn; *On the motion of a rigid body about a fixed point in space of constant curvature*, by J. Pierpont; *On the prime ideals of the general cubic Galois field*, by C. G. Latimer; *On the problem of existence of algebraic functions of two variables possessing a given branch curve*, by O. Zariski.

The opening number of volume 30, series 2, of the Annals of Mathematics (December, 1928) contains: *On cubic fields*, by A. Arwin; *The impossibility of a separation of types of linear odd divisors of binary quadratic forms*, by R. G. Archibald; *A parametric problem of the calculus of variations and its treatment as a problem of Lagrange*, by L. H. McFarlan; *On the fundamental existence theorems for differential systems*, by W. M. Whyburn; *On a class of Taylor's series*, by P. L. Srivastava; *Quartic equations with certain groups*, by R. Garver; *Canonical forms of plane cubic curves under euclidean transformations*, by R. S. Burington and H. K. Holt; *On forms which repeat under multiplication*, by C. G. Latimer; *On the multiple solutions of the Pell equation*, by D. H. Lehmer; *On certain hitherto unsolved cases of the complex multiplication of elliptic functions*, by S. C. Mitra; *On the complex roots of a*

transcendental equation occurring in the electron theory, by J. Pierpont; *Extended results in elimination*, by T. W. Moore; *Untersuchungen über Gestalt und Lage abgeschlossener Mengen beliebiger Dimension*, by P. Alexandroff; *Semi-parallel transformations of lines of curvature*, by M. M. Slotnick.

The new Accademia d'Italia consists of the following classes each with fifteen members: Exact and Natural Sciences, Moral Sciences, Arts, Literature. The first thirty members have recently been selected by the government. The representatives of pure and applied mathematics and physics are F. Severi, professor of calculus in the University of Rome, E. Fermi, professor of theoretical physics in the University of Rome, and G. Vallauri, professor of electrical engineering in the Technical School of Turin.

A Congress of Mathematicians of the Slavic Countries will be held at Warsaw, September 23–27, 1929, under the auspices of the head of the Polish government. Professor W. Sierpinski, of the University of Warsaw, is president of the executive committee of the Congress.

Cambridge University has awarded Smith's prizes to H. D. Ursell, of Clare College, and J. M. Whittaker, of Trinity College. Rayleigh prizes have been awarded to J. Hargreaves, of Clare College, J. G. Semple, of St. John's College, and S. Verblunsky, of Magdalene College.

The Italian Society of Sciences has awarded its prize in mathematics for the year 1928 to Professor C. Rosati, of the University of Pisa, for his researches in algebraic geometry.

The Watson medal of the National Academy of Sciences has been awarded to Dr. Willem de Sitter, director of the observatory at Leiden.

The Research Corporation of New York has awarded its research medal to Professor Werner Heisenberg, of the University of Leipzig, for "brilliant scientific achievement."

Professor Erwin Schrödinger has been elected a member of the Prussian Academy of Sciences.

Professor Heinrich Tietze, of the University of Munich, has been elected a member of the Bavarian Academy of Sciences.

Professor Guido Castelnuovo has been elected correspondent of the Paris Academy of Sciences in the section of geometry, as successor to the late Professor Luigi Bianchi.

The following have been elected correspondents of the Academy of Sciences of Turin: Professors L. Tonelli, G. Vitali, A. Signorini, E. Pistoiesi, F. Lori, and E. Fermi.

In the presence of the King of Norway, the University of Oslo commemorated, on March 6, 1929, the one hundredth anniversary of the death of

the Norwegian mathematician Abel. On this occasion honorary degrees were conferred on Professors Jacques Hadamard, G. H. Hardy and Paul Painlevé.

Professors Max von Laue, of the University of Berlin, and Arnold Sommerfeld, of the University of Munich, have been elected honorary members of the Leningrad Academy of Sciences.

Among the recently elected fellows of the Royal Society of Edinburgh are the following mathematicians: Dr. F. Bath, lecturer at the University of St. Andrews, and Mr. R. A. Robb, lecturer at the University of Glasgow.

Professor Pieter Zeeman, of the University of Amsterdam, has been elected an honorary member of the Physical Society of London.

The following have been recently elected foreign associates of the National Academy of Sciences: Dr. Willem de Sitter, director of the observatory at Leiden, Professor Arnold Sommerfeld, of the University of Munich, and Professor C. de la Vallée Poussin, of the University of Louvain.

The King of Italy has conferred the decoration of Officer of the Crown of Italy upon Dr. Raymond Pearl, director of the Institute of Biological Research of Johns Hopkins University.

Dr. Paul Dienes, lecturer in mathematics at University College, Swansea, and formerly of the University of Budapest, has been appointed university reader at Birkbeck College.

Dr. D. R. Hartree, of the Cavendish Laboratory, Cambridge, has been appointed to the Beyer chair of applied mathematics at the University of Manchester.

Professor Friedrich Hund, of the University of Rostock, has been appointed professor of mathematical physics at the University of Leipzig.

Dr. Pascual Jordan has been promoted to an associate professorship of theoretical physics at the University of Hamburg.

Associate Professor Theodor Kaluza, of the University of Königsberg, has been appointed professor of mathematics at the University of Kiel.

Dr. Harold R. Phalen, professor of mathematics and instructor in physics at St. Stephen's College, Columbia University, has been appointed dean of the college.

Dr. Tibor Rado has been appointed Lecturer in Mathematics at Harvard for the first term of the year 1929–1930. He will give a course on "Minimal Surfaces and the Problem of Plateau" together with a course on "The Elementary Theory of Differential Equations."

The University of Lwów has conferred an honorary doctorate on Professor W. Sierpiński, of the University of Warsaw.

Professor Leonida Tonelli has been transferred from the professorship

of algebraic analysis at the University of Bologna to the professorship of infinitesimal analysis at the same University.

Professor C. E. Weatherburn, of Canterbury College, Christchurch, New Zealand, has been appointed professor of mathematics at the University of Western Australia.

The following have been appointed docents: Dr. W. Nikliborc and Dr. J. P. Schander, at the University of Lwów; Dr. Zarankiewicz, at the University of Warsaw.

Professor E. R. Hedrick was selected to give the Fifth Annual Faculty Research Lecture at the University of California at Los Angeles. This lecture was given April 26, 1929, on the subject *Logical reasoning in mathematics and in science*.

Professor H. E. Slaughter, of the University of Chicago, delivered lectures during March 1929 on *How mankind learned to count* at Haverford College, Lafayette College, Lehigh University, Rutgers University, and Swarthmore College. These lectures were usually sponsored by mathematics clubs. The lectures were given for the purpose of stimulating interest in mathematics and they were well attended.

The original manuscript of Einstein's *Zur einheitlichen Feldtheorie*, recently published in the *Sitzungsberichte* of the Prussian Academy of Sciences, has been purchased for Wesleyan University by Mr. G. W. Davison and Mr. A. W. Johnston, two of the University's trustees.

A symposium on theoretical physics will be conducted at the University of Michigan, from June 24 to August 16, 1929. The following courses of lectures will be delivered: by E. A. Milne, of the University of Oxford, Problems in astrophysics, and vector and tensor methods in statics and dynamics; by K. F. Herzfeld, of Johns Hopkins University, Statistical mechanics; by Léon Brioullin, of the University of Paris, Quantum statistics; by Edward Condon, of Princeton University, Introduction to quantum mechanics; by P. A. M. Dirac, of the University of Cambridge, Advanced quantum mechanics; by D. M. Dennison, of the University of Michigan, Band spectra.

Assistant Professor H. M. Gehman, of Yale University, has been appointed head of the department of mathematics at the University of Buffalo.

Mr. W. J. Hazard has been promoted to an assistant professorship of mathematics at the University of Colorado.

Assistant Professors Lester S. Hill and Evelyn Walker have been promoted to associate professorships of mathematics at Hunter College.

Miss Marie Litzinger has been promoted to an assistant professorship of mathematics at Mount Holyoke College.

Professor W. V. Lovitt, of Colorado College, has been appointed Dean of Men; he retains his professorship of mathematics.

Assistant Professor A. D. Michal, of the Ohio State University, has been appointed associate professor of mathematics at the California Institute of Technology.

Professor W. E. Milne, who has been on leave as professor of mathematics at Stanford University this year, will return to the University of Oregon next fall. During his absence Dr. H. C. Hicks has served as assistant professor of mathematics at the University of Oregon.

Associate Professor L. L. Smail, of Lehigh University, has been promoted to a professorship of mathematics.

Dr. P. A. Smith has been promoted to an assistant professorship of mathematics at Barnard College, Columbia University.

Dr. W. J. Trjitzinsky has been promoted to an assistant professorship of mathematics at Lehigh University.

Professor James V. Uspensky of the Russian Academy of Sciences has been appointed professorial lecturer at the University of Minnesota for the summer quarter, and part of the spring quarter. During the spring quarter he lectured on *Integration in finite form*. He will lecture on the *Theory of numbers* in the first session of the summer quarter and on the *Theory of probability* in the second session.

Mr. Charles H. Vehse, of Brown University, has been appointed assistant professor of mathematics at the University of West Virginia.

Dr. Louis Weisner has been promoted to an assistant professorship of mathematics at Hunter College.

The following appointments to instructorships are announced:

Barnard College, Columbia University: Dr. Lulu Hofmann, Mr. H. W. Raudenbush.

Brown University, Mr. G. N. Carmichael, Mr. K. G. Fuller of Northwestern University.

Harvard University, Dr. T. F. Cope.

Hunter College, Mr. Aubrey W. Landers, Jr.

The Johns Hopkins University, Dr. Oscar Zariski (Associate).

Swarthmore College, Mr. Aubrey H. Smith.

University of Wyoming, Mr. Richard W. Warner, Mr. C. N. Shuster.

Jorge Duclout, engineer and honorary professor of the theory of elasticity at the University of Buenos Aires, died February 15, 1929, at the age of seventy-five.

Professor Erik Schou, of the Copenhagen Technical School, died November 8, 1928, at the age of fifty-five.