

## NOTES

The Spring Meeting of the American Association for the Advancement of Science will be held at the University of Syracuse during the week of June 20–25. Section A (Mathematics) will meet on Wednesday, June 22, with addresses by Professor H. M. Gehman on *Homeomorphic geometry of the projective plane*, by Professor W. A. Hurwitz on *Logical foundations for groups and fields*, and by Professor J. Shohat on *Interpolation*. Professor W. B. Carver will deliver a general address before the Association on *A layman's introduction to higher mathematics*, and Professor E. R. Hedrick will participate in a symposium on general educational problems.

A new Chinese scientific journal has recently been founded, the Science Reports of the National Tsing Hua University, Peiping, Series A, Mathematical and Physical Sciences. The first two numbers are in English.

The Academy of Sciences of the Ukraine, Kief, has begun publication of two new journals, the Bulletin de la Classe des Sciences Naturelles et Techniques and the Journal du Cycle Mathématique.

The Yale Law Journal for March, 1932, contains an article on *The nature of the doctrinal function and its rôle in rational thought*, by Professor C. J. Keyser, of Columbia University.

The Comité International d'Histoire des Sciences will hold its fourth annual meeting in Paris, May 13–16, 1932.

Professors W. H. Bussey and G. C. Evans have been elected vice-presidents of the Mathematical Association of America, and Professors H. E. Buchanan, W. B. Ford, E. R. Hedrick, and W. R. Longley members of its Board of Trustees.

The Belgian Academy has awarded its de Potter prizes, for the period 1928–1930, in astronomy and mathematics, respectively, to Professors Germay and Lepage.

The Scientific and Research Institute of Mathematics and Mechanics of the University of Moscow has awarded a prize of 750 roubles to L. S. Pontrjagin, member of that Institute, for his paper *Über stetige algebraische Körper*, recently published in the Annals of Mathematics, (2), vol. 33 (1932), pp. 163–174.

The British Institution of Electrical Engineers has awarded its Faraday medal to Sir Oliver Lodge.

Cambridge University has awarded Smith's prizes to D. W. Babbage, of Magdalene College, for an essay on *Cremona transformations*, and H. M. Taylor, of Clare College, for an essay on *The anomalous scattering of X-rays*, and Rayleigh prizes to J. Cossar, of Magdalene College, for an essay *On Fourier integrals*, and V. V. Narliker, noncollegiate, for an essay on *Cosmogony and astronomical dynamics*.

The gold medal of the Royal Astronomical Society has been awarded to Dr. R. G. Aitken, of the Lick Observatory, for his work on double stars.

Dr. Irving Langmuir, of the General Electric Company, has been awarded the prize of the Popular Science Monthly for notable scientific achievement.

Professor Henri Villat, of the Sorbonne, has been elected a member of the Paris Academy of Sciences in the section of mechanics, as successor to the late Gabriel Koenigs.

It will be of particular interest to those who know and honor him, and to those interested in correct principles of academic tenure, to learn that Senator Vito Volterra, professor of mathematical physics at the University of Rome since 1900, has been dismissed from active service for refusal to take the university oath recently required by the fascist government.

The Council of the Royal Society of London has recommended the following mathematicians for election as fellows of that Society: D. R. Hartree, Beyer professor of applied mathematics, University of Manchester, and H. W. Turnbull, professor of mathematics, University of St. Andrews.

Sir James Hopwood Jeans has been elected an honorary member of the Washington Academy of Sciences.

At a special convocation called to commemorate the bicentenary of the birth of Washington, George Washington University conferred honorary doctorates of science on Professors C. N. Moore, of the University of Cincinnati, and J. F. Ritt, of Columbia University, both alumni of the University.

The French government has conferred the designation *Officier d'Académie* and the decoration *palmes académiques* on Professor E. R. Hedrick, of the University of California at Los Angeles, "for services rendered to the cause of culture and of science." The ceremony was performed by the French Consul at Los Angeles, M. Henri Didot, on April 13, 1932.

Associate Professor F. S. C. Northrop, of Yale University, has been awarded a Guggenheim fellowship, "to review and evaluate current conceptions of the nature of mathematics and formal logic, and to determine the status of form in nature."

Professor Richard Baldus, of the Karlsruhe Technische Hochschule, has been appointed professor of geometry at the Munich Technische Hochschule.

Dr. G. Mammana, of the University of Cagliari, has been promoted to a professorship of the calculus.

Mr. R. H. Fowler, fellow of Trinity College, Cambridge, has been appointed to the John Humphrey Plummer professorship of mathematical physics at Cambridge University.

The title of fellow of University College, London, has been conferred upon Professor A. R. Richardson, of the University College of Swansea.

Dr. G. F. J. Temple, reader in mathematics at Imperial College, Royal College of Science, University of London, has been appointed to the chair of mathematics at King's College, in the same University.

Professor P. Debye, of the Physical Institute of Leipzig, has been appointed Scott lecturer at Cambridge University for the year 1932. Professor Debye has recently delivered a series of lectures on X-ray scattering and molecular structure at the Massachusetts Institute of Technology.

Dr. W. A. Shewhart, of the Bell Telephone Laboratories, will lecture at the University of London in the spring of 1932 on the rôle of statistical method in

industrial standardization, and will hold a series of conferences on theoretical and applied statistics in Great Britain and on the Continent. Dr. Shewhart has recently been elected a fellow of the Royal Statistical Society of England.

The following seventy-six doctorates with mathematics or mathematical physics as major subject were conferred during 1931 in universities in the United States and Canada; the major subject is mathematics unless otherwise specified. The university, month in which the degree was conferred, minor subject (other than mathematics), and title of dissertation are given in each case if available.

D. B. Ames, Yale, June, *A resonance problem in celestial mechanics.*

F. S. Beale, Michigan, *On the solutions of systems of linear difference equations with polynomial coefficients.*

H. F. Bohnenblust, Princeton, April, *The absolute convergence of Dirichlet series.*

Samuel Borofsky, Columbia, April, *Expansion of analytic functions into infinite products.*

Sister Leonarda Burke, Catholic, June, minors in education and physics, *On a case of the triangles in- and circumscribed to a rational quartic curve with a line of symmetry.*

L. E. Bush, Ohio State, August, *Some properties of algebras without moduli.*

S. S. Cairns, Harvard, June, *The cellular division and approximation of regular spreads.*

Helen Calkins, Cornell, November, *Some implicit functional theorems.*

A. B. Cardwell, Wisconsin, June, minor in physics, major in mathematical physics, *Photoelectric and thermionic properties of metals.*

Evelyn T. Carroll, Cornell, October, *Systems of involutorial birational transformations contained multiply in special linear line complexes.*

Emily M. Chandler (Mrs. H. H. Pixley), Chicago, August, *Waring's theorem for fourth powers.*

Max Coral, Chicago, August, *The Euler-Lagrange multiplier rule for double integrals.*

A. T. Craig, Iowa, June, *On the distribution of certain statistics derived from small random samples.*

J. H. Dillon, Wisconsin, June, major in physics, minor in mathematics, *Photoelectric properties of zinc single crystals.*

J. E. Donohue, Columbia, March, *Concerning the geometry of the second derivative of a polygenic function.*

H. L. Dorwart, Yale, June, *Certain types of criteria for the irreducibility of polynomials.*

R. D. Douglass, Massachusetts Institute of Technology, June, minor in physics, *Stirling expansions derived by means of finite de la Vallée-Poussin summation.*

Ben Dushnik, Michigan, *On the Stieltjes integral.*

J. N. Eastham, Catholic, June, minors in civil engineering and physics, *The triangles in- and circumscribed to the tacnodal rational quartic curve with residual crunode.*

H. C. T. Eggers, Michigan, *The graduation of experimental data.*

J. M. Feld, Columbia, November, *Projective pedal transformations and birational contact transformations.*

N. C. Fisk, Michigan, *An investigation of surfaces in euclidean four-space by means of three-vectors.*

A. L. Foster, Princeton, January, *A continuous development of formal logic in finite terms.*

Sister Mary de Lellis Gough, Catholic, June, minors in education and physics, *On the condition for the existence of triangles in- and circumscribed to certain types of the rational quartic curve and having a common side.*

Eli Gourin, Columbia, May, *On irreducible polynomials in several variables which become reducible when the variables are replaced by powers of themselves.*

M. L. Hartung, Wisconsin, June, minor in mathematical physics, *On a family of integral equations with discontinuous kernels.*

T. W. Hatcher, Cornell, August, minor in engineering, *Symmetric strain in an infinite plate with a circular hole.*

R. A. Hefner, Chicago, August, *The condition of Mayer for discontinuous solutions of the Lagrange problem.*

C. T. Holmes, Harvard, June, *The approximation of harmonic functions in three dimensions by harmonic polynomials.*

H. N. Hubbs, Cornell, February, minor in physics, *Rational quintic surfaces without double curves.*

W. R. Hutcherson, Cornell, June, minor in physics, *Maps of certain cyclic involutions on two dimensional carriers.*

D. R. Inglis, Michigan, *Atomic problems in the perturbation theory of quantum mechanics.*

Sister Mary Cordia Karl, Johns Hopkins, June, *The projective theory of orthopoles.*

Donald McDonough, Pennsylvania, June, *On the expansion of a certain type of determinant.*

W. O. Menge, Michigan, *A direct method of obtaining transformations to canonical forms.*

H. L. Miller, Cincinnati, June, *On the summability of non-integral orders of the double Fourier series.*

G. E. Moore, Illinois, June, minor in astronomy, *The four-termed theta identities arising from a generalization of the Weddle surface in  $S_4$ .*

C. B. Morrey, Harvard, June, *Invariant functions of conservative surface transformations.*

Sister Charles Mary Morrison, Catholic, June, minors in philosophy and physics, *The triangles in- and circumscribed to the biflecnodal rational quartic curve.*

M. E. Mullings, Cincinnati, June, minor in physics, *On Gibbs's phenomenon in the double Fourier series.*

C. V. Newsom, Michigan, *On the behavior of entire functions in distant portions of the plane.*

E. G. Olds, Pittsburgh, June, *The nature of the distributions in small samples.*

A. L. O'Toole, Michigan, *On symmetric functions and symmetric functions of symmetric functions.*

L. J. Paradiso, Cornell, October, minor in economics, *Solutions of bounded variation of the Fredholm Stieltjes integral equation.*

W. V. Parker, Brown, June, *The addition formulas for hyperelliptic functions.*

Jesse Pierce, Michigan, *Logarithmic solutions of systems of differential equations and solutions in the vicinity of isolated singular points.*

H. H. Pixley, Chicago, August, *A problem in the calculus of variations suggested by a problem in economics.*

Saul Pollock, California (Berkeley), May, *Graphic representation in enumerative geometry.*

J. E. Powell, Chicago, August, *Edge conditions for multiple integrals in the calculus of variations.*

H. R. Pyle, California (Berkeley), May, *The conditions for conformality in the elliptic and hyperbolic geometries.*

Mina S. Rees, Chicago, March, *Division algebras associated with an equation whose group has four generators.*

B. J. Roberts, Iowa, August, minor in physics, *On continua in vectorial spaces.*

H. A. Robinson, Johns Hopkins, March, *Case of planar motion in which one centre and one path are circles.*

S. L. Robinson, Iowa, August, minors in physics and philosophy, *A study of simple and multiple transitivity in topological spaces.*

A. E. Ross, Chicago, August, *On representation of integers by indefinite ternary quadratic forms.*

T. A. Rouse, Wisconsin, June, major in physics, minor in mathematics, *Characteristic X-ray absorption.*

R. G. Sanger, Chicago, June, *Functions of lines and the calculus of variations.*

M. G. Scherberg, Minnesota, June, minor in physics, *The degree of convergence of a series of Bessel functions.*

Mabel F. Schmeiser, Ohio State, August, *Properties of arbitrary functions concerning approach to a straight line.*

C. Grace Shover, Ohio State, December, *On the class number and ideal multiplication in a rational linear associative algebra.*

James Singer, Princeton, April, *Three-dimensional manifolds and their Heegaard diagrams.*

P. K. Smith, Illinois, June, minor in physics, *On solutions of linear partial differential equations near singular points.*

T. L. Smith, Harvard, June, *The Birkhoff fluid theory of electricity.*

I. S. Sokolnikoff, Wisconsin, June, *On a solution of Laplace's equation with an application to the torsion problem for a polygon with reentrant angles.*

F. W. Sparks, Chicago, August, *Universal quadratic zero forms in four variables.*

R. C. Stephens, Iowa, August, minor in physics, *Continuous functions on abstract sets.*

W. T. Stratton, Washington (Seattle), August, minor in physics, *A study of general polar tangent curves.*

Mildred E. Taylor, Illinois, August, minor in physics, *A determination of the types of planar Cremona transformations with not more than 9 F-points.*

C. C. Torrance, Cornell, June, minor in physics, *On plane Cremona triadic characteristics.*

Sister Mary Felice Vaudreuil, Catholic, June, minors in education and physics, *Two correspondences determined by the tangents to a rational cuspidal quartic curve with a line of symmetry.*

C. C. Wagner, Michigan, *A statistical study of the dependence for four chance variables.*

W. G. Warnock, Illinois, May, minor in astronomy, *On the geometry of groups of line configurations.*

H. E. Wheeler, Chicago, June, *An application of symbolic methods to frequency arrays.*

S. S. Wilks, Iowa, June, minor in education, *On the distribution of statistics in samples from a normal population of two variables with matched sampling of one variable.*

R. P. Winch, Wisconsin, June, major in physics, minor in mathematics, *Photoelectric properties of silver.*

Yue-Kei Wong, Chicago, December, *Spaces associated with non-modular matrices with application to reciprocals.*

Professor Vannevar Bush has been appointed dean of engineering and vice-president at the Massachusetts Institute of Technology.

Dr. James W. Glover, who has been on leave of absence from the University of Michigan, and who has been president of the Teachers Insurance and Annuity Association of America, has resigned from his position in the Association and will resume his professorship of mathematics at the University of Michigan beginning with the coming academic year.

Assistant Professor Tobias Dantzig, of the University of Maryland, has been promoted to an associate professorship of mathematics.

Guillaume Bigourdan, honorary chief astronomer of the Paris Observatory, and member of the Paris Academy of Sciences in the section of astronomy, died February 28, 1932, at the age of eighty.

Dr. J. C. Glashan, of Ottawa, Canada, died March 14, 1932, at the age of eighty-eight. Dr. Glashan had been a member of the American Mathematical Society since 1891.

D. H. Marshall, professor emeritus of mathematical physics at Queen's University, Kingston, Ontario, died March 14, 1932, at the age of eighty-four.

Dr. James Mercer, F. R. S., fellow and lecturer in mathematics at Christ's College, Cambridge, died February 21, 1932, at the age of forty-nine.

Professor Wilhelm Ostwald, of the University of Leipzig, known for his work in physical chemistry, died April 4, 1932, at the age of seventy-eight.

Professor H. J. Priestley, of the University of Queensland, Brisbane, died February 26, 1932, at the age of forty-eight.

Dr. T. H. Gronwall, associate in physics at Columbia University, died May 9, 1932, at the age of fifty-five. He had been a member of the American Mathematical Society since 1912.

Dr. F. M. Hartmann, dean of the School of Engineering, Cooper Union, died March 28, 1932, at the age of sixty-one. Dean Hartmann was a member of the American Mathematical Society.

Miss Lylah Kryder, instructor in mathematics at Brooklyn College, died March 29, 1932.