

NOTES

By invitation of the Program Committees, several addresses will be delivered at meetings of the Society during the Fall, as follows:

At New York City, October 26, 1929, by Professor Tomlinson Fort, on *The general theory of factorial series*.

At Ann Arbor, November 29, 1929, by Professor Tomlinson Fort, on *The general theory of factorial series*; and by Professor L. M. Graves, on *Discontinuous solutions in the calculus of variations*.

At Pasadena, November 29, 1929, by Professor M. W. Haskell, on *Autopolar configurations in two and in three dimensions*.

At the Annual Meeting of the Society, to be held at Lehigh University, Bethlehem, Pennsylvania, on December 27-28, 1929, both the morning and the afternoon of Saturday will be devoted to a symposium on the general topic, *The differential equations of engineering*. By invitation of the Program Committee, addresses will be given by Professor H. W. March, The University of Wisconsin, on *The problem of diffusion*; by Professor Vannevar Bush, The Massachusetts Institute of Technology, on *Integrals for differential equations*; by Dr. T. H. Gronwall, Columbia University, on *Numerical integration of differential equations*; by Dr. Ing. A. Nadai, The Westinghouse Electric and Manufacturing Company (formerly Professor of Applied Mathematics, University of Goettingen), on *Plasticity and related problems of non-rigid bodies*; by Mr. R. H. Park, Engineering Department, The General Electric Company, on *Analytic determination of flux plots*; by Professor S. Timoshenko, The University of Michigan (formerly with the Westinghouse Company), on *Problems in elasticity*. Professor Tomlinson Fort is chairman of the Committee on Arrangements.

At the meeting of the Society at Des Moines, Iowa, in conjunction with the meetings of the American Association for the Advancement of Science and of the Mathematical Association of America, on December 30-31, 1929, Professor L. L. Dines will give an address on *Linear inequalities and some related properties of functions* before the joint meeting of the Society and the Mathematical Association; and Professor O. D. Kellogg will give an address on *An unsolved problem of uniqueness in potential theory*. The annual Josiah Willard Gibbs address by Professor Irving Fisher on *Applications of mathematics to the social sciences*, will be held on Tuesday, December 31. A special announcement concerning this meeting will be issued.

At the meeting in New York City, February 21, 1930, by invitation of the Program Committee, Mr. E. C. Molina will give an address on *The theory of probabilities*.

The Colloquium Editorial Committee wishes to call attention to the fact that in addition to the Colloquium Lectures delivered before the Society, it is in a position to print a few other volumes. Authors are invited

to submit manuscripts. For further information, see page 100 of volume 32 of this Bulletin.

A new volume of the Colloquium Series, Coble's *Algebraic Geometry and Theta Functions*, has appeared and may be obtained through the New York Office of the Society. The edition of Veblen's *Analysis Situs* (Cambridge Colloquium, Part II) being exhausted, a new edition will be prepared and will probably appear in 1930.

The tercentenary of the birth of Christiaan Huygens was celebrated at Leiden in April, 1929, under the auspices of the Royal Academy of Sciences and the Senate of the University of Leiden.

On June 29, 1929, the Berlin Physical Society celebrated the fortieth anniversary of Professor Max Planck's entrance into scientific work. That Society has created a medal in his honor, to be awarded for distinguished work in mathematical physics (see this Bulletin, vol. 34, p. 792). On this occasion Professor Planck presented the first cast of this medal to Professor Albert Einstein, emphasizing particularly his influence on the development of the quantum theory.

The Alfred Ackermann-Teubner memorial prize for 1928 has been awarded to Professor Albert Defant, director of the Institut für Meereskunde, Berlin, for his work collected and published in *Das Zeitenproblem des Meeres in Landesnähe*, Hamburg, 1925.

The Adams prize of Cambridge University for 1927-28 has been awarded to Professor Sydney Chapman, of the Imperial College of Science Technology, London, for a memoir on the announced subject *The variations in the earth's magnetic field in relation to electric phenomena in the upper atmosphere and on the earth*. The Sudbury Hardyman prize of Emmanuel College, Cambridge, has been awarded to A. H. Wilson, for a dissertation on *Quantum mechanics*.

The medal of the class of 1889, Columbia University, has been awarded to Dr. Irving Langmuir, of the General Electric Company, for "distinguished achievement in improving the incandescent electric light."

Professor Frank Schlesinger, of Yale University, has been awarded the Bruce medal of the Astronomical Society of the Pacific.

On the occasion of the Abel centenary celebration, the University of Oslo conferred honorary degrees on the following mathematicians, in addition to those listed in the last issue of this Bulletin (pp. 583-584): Professors L. E. J. Brouwer of Amsterdam, Friedrich Engel of Giessen, Rudolph Fueter of Zürich, Kurt Hensel of Marburg, Christian Juel of Copenhagen, Edmund Landau of Göttingen, E. L. Lindelöf of Helsingfors, L. E. Phragmén of Stockholm, Salvatore Pincherle of Bologna, Teiji Takagi of Tokyo, Charles de la Vallée-Poussin of Louvain, Oswald Veblen of Princeton, and Hermann Weyl of Zürich.

Professor Jules Drach, of the Sorbonne, has been elected a member of the Paris Academy of Sciences in the section of mechanics, as successor to the late Professor J. Boussinesq.

The Royal Academy dei Lincei has elected Professor G. Peano (Turin) national member; Professors G. D. Birkhoff (Cambridge, Mass.), C. Carathéodory (Munich), A. Sommerfeld (Munich) foreign associates.

The Accademia Pontificia in Rome has elected Father G. Boccardi (retired professor of the University of Turin) and Professor E. Pistoiesi, of the University of Pisa, ordinary members, and Professor T. Levi-Civita, of the University of Rome, corresponding member.

Associate Professors L. Brusotti and F. Cecioni, of the University of Pisa, G. Giorgi, of the University of Cagliari, G. Marletta, of the University of Catania, and E. G. Togliatti, of the University of Genoa, have been promoted to professorships.

The University of Paris has conferred an honorary doctorate on Professor Albert Einstein.

Professor Leon Lichtenstein, of the University of Leipzig, has been elected a member of the Polish Academy of Sciences, Cracow.

Professor I. Schur, of the University of Berlin, has been elected a corresponding member of the Leningrad Academy of Sciences.

The University of Glasgow has conferred an honorary doctorate on Professor H. S. Carslaw, of the University of Sydney and Emmanuel College, Cambridge.

Cambridge University has conferred honorary doctorates on Professor Paul Langevin and Sir Frank Dyson.

Dr. Irving Langmuir, of the General Electric Company, has received an honorary doctorate from the Charlottenburg Technical School.

Among the recent elections to the National Academy of Sciences are the following: Dr. C. J. Davisson, of the Bell Telephone Laboratories; Professor Bergen Davis, of Columbia University; Professor William Hovgaard, of the Massachusetts Institute of Technology.

The following have been elected to the American Academy of Arts and Sciences: fellows, Professors Marston Morse and J. L. Walsh, of Harvard University; foreign honorary members, Professors V. F. K. Bjerknæs, of the University of Oslo, Ludwig Prandtl, of the University of Göttingen, Willem de Sitter, of the University of Leiden, and Hermann Weyl, of the Zurich Technical School.

Honorary doctorates have been conferred on Professor A. H. Compton, of the University of Chicago, by Yale University, and by Ohio State University.

The University of Michigan has conferred the honorary degree of doctor of laws on Professor R. A. Millikan, of the California Institute of Technology.

Columbia University has conferred an honorary degree on Dr. G. A. Plimpton, trustee of Barnard College, known to mathematicians for his collections of mediaeval mathematical works.

Harvard University has conferred an honorary doctorate on Professor H. N. Russell, of Princeton.

Swarthmore College has conferred an honorary doctorate on Dr. W. F. G. Swann, director of the Bartol Foundation of the Franklin Institute.

Guggenheim fellowships for 1929 have been awarded to the following persons: Dr. Dinsmore Alter, professor of astronomy, University of Kansas, for research on the application of statistical methods to meteorological and astronomical problems; Dr. O. S. Duffenbach, assistant professor of physics, University of Michigan, for an investigation of molecular impact phenomena in gases and the relation of these to the excited states of molecules and the chemical binding of their atoms; Dr. Olive C. Hazlett, assistant professor of mathematics, University of Illinois, for the continuation of studies of the arithmetics of linear associative algebras; Dr. R. J. Kennedy, research associate, California Institute of Technology, for the continuation of researches in the theory of radiation; Dr. W. M. Latimer, associate professor of chemistry, University of California, for the study of the thermodynamic treatment of solutions with a view to extending work on the entropy of aqueous ions; Dr. R. S. Mulliken, associate professor of physics, University of Chicago, for work on theoretical problems connected with the subject of the formation and dissociation of molecules and the assignment of quantum numbers for electrons in molecules, based on the study of band spectra; Dr. J. C. Slater, assistant professor of physics, Harvard University, for research in quantum mechanics; Dr. C. H. Smiley, instructor in mathematics, University of Illinois, to investigate methods of determining orbits of comets and asteroids; Dr. J. H. Van Vleck, professor of theoretical physics, University of Wisconsin, for research in quantum mechanics; Dr. G. T. Whyburn, adjunct professor of mathematics, University of Texas, for research in point set theory, with particular emphasis on the structure of continua and of continuous curves. The above list includes renewals.

Professor A. Fraenkel, of the University of Kiel, has declined a permanent professorship at the University of Jerusalem, but has accepted an appointment for the academic years 1929-30, 1930-31. Dr. R. Schmidt will take his place at the University of Kiel during this interval.

Dr. Vojtěch Iarník, of the Czech University at Prague, has been promoted to an associate professorship of mathematics.

Dr. Heinrich Ott has been promoted to an associate professorship of theoretical physics at the University of Würzburg.

Associate Professor Bernhard Schilling, of the Dresden Technical School, has been appointed professor of mathematics at the University of Santiago, Chile.

Associate Professor Viktor Trkal, of the Czech University at Prague has been promoted to a professorship of theoretical physics.

Dr. W. Hurewicz has been admitted as privat docent at the University of Amsterdam.

Professor J. Sun, of Yenching University, Pekin, has been appointed head of the department of astronomy at North-Eastern University, Mukden, China.

At Cambridge University, F. C. Burkill, of Peterhouse, P. A. M. Dirac, of St. John's, and F. P. Ramsey, of King's, have been appointed university lecturers in mathematics. Dr. W. M. Smart, of Trinity College, chief assistant at the Observatory, has been appointed to the John Couch Adams astronomership.

Mr. E. C. Titchmarsh, of the University of London, has been appointed professor of pure mathematics at the University of Liverpool.

Associate Professor B. A. Bernstein, of the University of California, has been promoted to a professorship of mathematics.

Professor Florian Cajori, of the University of California, has retired, as professor emeritus of the history of mathematics.

Associate Professor C. C. Camp, of the University of Nebraska, has been promoted to a professorship.

Assistant Professor E. F. A. Carey, of the University of Montana, has been promoted to an associate professorship.

Assistant Professor E. U. Condon, of Princeton, has been appointed professor of theoretical physics at the University of Minnesota.

Dr. C. M. Cramlet, National Research Fellow, has been appointed assistant professor of mathematics at the University of Washington.

Associate Professor J. C. Fitterer, of the Colorado School of Mines, has been promoted to a professorship.

Dr. William Gafafer has been appointed research associate at Johns Hopkins University.

Mr. W. H. Gage, of Victoria College, British Columbia, has been promoted to an assistant professorship of mathematics.

Associate Professor C. A. Garabedian, of the University of Cincinnati, has been appointed associate professor of mathematics at St. Stephen's College, Columbia University.

Professor W. V. N. Garretson, of Ouachita College, Arkadelphia, has been appointed associate professor of mathematics at the Oklahoma Agricultural and Mechanical College.

Assistant Professor H. C. Hicks, of the University of Oregon, has been appointed professor of mathematics and aeronautics at Texas Technological College.

Assistant Professor J. W. Hurst, of Montana State College, has been promoted to an associate professorship.

Dr. C. G. Jaeger, of the University of Missouri, has been appointed to an assistant professorship at Tulane University.

Assistant Professor R. A. Johnson, of Hunter College, has been promoted to an associate professorship.

Miss Elizabeth Knight, of the Milwaukee State Normal School, has been promoted to an assistant professorship.

Miss Edna Kramer has been appointed assistant professor of mathematics at the New Jersey State Teachers College, Upper Montclair.

Assistant Professor C. H. Langford, of the University of Washington, has been appointed associate professor of philosophy at the University of Michigan.

Mr. T. R. Long has been promoted to an assistant professorship at the University of Rochester.

Associate Professor C. E. Love has been promoted to a professorship at the University of Michigan.

Mr. C. I. Lubin, of the University of Cincinnati, has been promoted to an assistant professorship.

Mr. C. T. Male, of Union College, has been promoted to an assistant professorship.

Mr. A. E. Meder has been promoted to an assistant professorship at the New Jersey College for Women, Rutgers University.

Dr. T. W. Moore, National Research Fellow, has been appointed research associate at Princeton University.

Dr. G. W. Myers, professor of the teaching of mathematics and astronomy in the school of education at the University of Chicago, has retired.

Mr. G. A. Parkinson, of the University of Wisconsin, has been promoted to an assistant professorship.

Mr. C. S. Porter, of Amherst College, has been promoted to an associate professorship.

Associate Professor B. P. Reinsch, of Southern Methodist University, has been promoted to a professorship of mathematics.

Assistant Professor H. P. Robertson, of the California Institute of Technology, has been appointed assistant professor of mathematical physics at Princeton University.

Dr. I. M. Sheffer, National Research Fellow, has been appointed assistant professor of mathematics at Pennsylvania State College.

Assistant Professor J. H. Taylor, of the University of Wisconsin, has been appointed professor of mathematics at George Washington University.

Mr. G. C. Vedova has been promoted to an assistant professorship at St. John's College, Annapolis.

Assistant Professor R. L. Wilder, of the University of Michigan, has been promoted to an associate professorship.

Mr. F. G. Williams, of Cornell University, has been appointed professor of mathematics at Susquehanna University.

The following appointments to instructorships are announced:

Columbia University, Dr. A. A. Albert.

College of the City of Detroit, Dr. K. W. Folley, Dr. D. C. Morrow.

Harvard University, Mr. A. E. Andersen, Mr. A. E. Currier, Mr. G. A. Hedlund, Mr. S. H. Kimball, Mr. G. B. Morrey, Mr. S. B. Myers, Mr. G. Sauté, Mr. G. B. Van Schaack, Mr. C. Wexler.

Long Island University, Mr. E. A. Knobelauch.

Purdue University, Mr. E. L. Klinger, Mr. J. M. Thompson.

Rice Institute, Dr. L. M. Blumenthal.

Worcester Polytechnic Institute, Mr. S. A. Lepeshkin.

Professor Henri Andoyer, of the Sorbonne, member of the Paris Academy of Sciences in the section of astronomy, died June 12, 1929, at the age of sixty-six.

Dr. Karl Heun, professor of theoretical mechanics at the Karlsruhe Technical School, died January 10, 1929.

Professor E. Hoppe, of Göttingen, known for his work in the history of mathematics, died August 12, 1928.

George Birtwistle, fellow of Pembroke College, Cambridge, died May 19, 1929, at the age of fifty-two.

Sir George Knibbs, of Melbourne, Australia, formerly director of the Commonwealth Institute of Science and Industry, and author of *The Mathematical Theory of Population*, died March 30, 1929, at the age of seventy.