NOTES

The Society's Third Symposium on Applied Mathematics will be held in the summer of 1949. Invitations from institutions wishing to act as hosts should be sent to the Chairman of the Committee on Applied Mathematics, Professor J. L. Synge, Carnegie Institute of Technology, Pittsburgh 13, Pennsylvania. All invitations received will be considered simultaneously, the closing date for receipt of invitations being June 30, 1948. It is requested that each institution indicate a proposed subject for the Symposium, and state whether adequate facilities for meetings and dormitory accommodation would be available.

The Institute of Mathematical Statistics has announced the election of the following officers: Professor Abraham Wald of Columbia University as president; Dr. Churchill Eisenhart, Chief of the Statistical Engineering Laboratory of the National Bureau of Standards, and Associate Professor Henry Scheffé of the University of California at Los Angeles as vice presidents.

A new journal, *Communications on Applied Mathematics*, has been announced by the Institute for Mathematics and Mechanics at New York University. It will be issued quarterly and the first number appeared in January 1948.

Professor Y. C. Wong of National Sun Yat-Sen University has been awarded an honorary doctorate of science by the University of London.

Dr. Mina Rees of the office of Naval Research and Dr. Warren Weaver of the Rockefeller Foundation have received the British award of the King's Medal for Service in the Cause of Freedom in recognition of valuable services rendered to the allied war effort in various fields of scientific research and development.

Professor Selig Brodetsky of the University of Leeds has retired.

Professor T. G. Cowling of the University College of North Wales has been appointed to a professorship at the University of Leeds.

Dr. C. Y. Pauc of the University of Marseille has been appointed a lecturer at the University of Cape Town.

Dr. H. W. E. Schwerdtfeger of the University of Adelaide has been appointed to the position of senior lecturer at the University of Melbourne.

Dr. Valentine Bargmann of Princeton University has been appointed to an associate professorship at the University of Pittsburgh.

Assistant Professor Richard Bellman of Princeton University has

been appointed to an associate professorship at Stanford University.

Professor Richard Brauer of the University of Toronto has been appointed to a professorship at the University of Michigan.

Mr. A. G. T. Carlton has been appointed to an assistant professorship at the University of Illinois.

Assistant Professor F. O. Duncan of the University of Missouri has retired.

Dr. H. H. Germond has accepted a position as research scientist at the Douglas Aircraft Company, Santa Monica, California.

Professor L. K. Hua of Tsing Hua University has been appointed a lecturer at Princeton University.

Associate Professor Witold Hurewicz of the Massachusetts Institute of Technology is at Princeton University as a visiting professor.

Mr. Sidney Kravitz of Newark College of Engineering has accepted a position as mathematician with the Ballistic Research Laboratories, Aberdeen Proving Ground, Maryland.

Dr. G. R. MacLane of Harvard University has been appointed to an assistant professorship at Rice Institute.

Mr. Richard Otter of Princeton University has been appointed to an assistant professorship at the University of Notre Dame.

Professor Anna Pell-Wheeler of Bryn Mawr College will retire in June 1948.

Professor Joseph Pierce of Atlanta University has been appointed to an associate professorship at Wayne University.

Professor J. B. Reynolds of Lehigh University will retire at the end of this academic year.

Mr. E. D. Schell has accepted an appointment as chief of the Mathematics and Electronic Computor Branch, Office of the Comptroller, United States Air Forces.

Associate Professor Max Shiffman of New York University has been appointed to a professorship at Stanford University.

Professor J. L. Synge of Carnegie Institute of Technology has been appointed to a professorship in the School of Theoretical Physics of the Dublin Institute for Advanced Studies.

Professor A. H. Taub of the University of Washington has been appointed to a research professorship of applied mathematics at the University of Illinois.

Assistant Professor P. M. Whitman of Tufts College has accepted a position at the Applied Physics Laboratory, Silver Spring, Maryland.

Professor C. R. Wylie of the Army Air Forces Institute of Technology, Wright Field, has been appointed to a professorship at the University of Utah.

The following promotions are announced:

R. E. Basye, Agricultural and Mechanical College of Texas, to an assistant professorship.

W. M. Borgman, Wayne University, to the position of assistant dean of administration.

Alonzo Church, Princeton University, to a professorship.

T. F. Cope, Queens College, to a professorship.

E. R. Heineman, Texas Technological College, to a professorship.

P. W. Ketchum, University of Illinois, to a professorship.

Harry Levy, University of Illinois, to an associate professorship.

E. R. Lorch, Columbia University, to a professorship.

C. W. Mendel, University of Illinois, to an associate professorship.

H. J. Miles, University of Illinois, to a professorship.

Vivian R. Nuess, University of Illinois, to an assistant professorship.

Bob Parker, Texas Technological College, to an assistant professorship.

J. W. Peters, University of Illinois, to an associate professorship.

H. V. Price, State University of Iowa, to an associate professorship.

L. W. Swanson, Coe College, to an associate professorship.

H. P. Wirth, College of the City of New York, to an associate professorship.

Leo Zippin, Queens College, to an associate professorship.

The following appointments to instructorships are announced: University of Illinois: Mr. Furio Alberti, Dr. M. D. Springer; University of Michigan: Mr. S. W. Hahn; New York State College for Teachers: Mr. Rudolph Cherkauer; Pennsylvania State College: Mr. M. M. Resnikoff; Princeton University: Dr. H. N. Shapiro; Texas Technological College: Mrs. Susie Kammerdiener, Miss Lillian McGlothlin, Mr. E. H. Thomas, Mrs. Naomi Thompson; Wayne University: Mr. J. M. Patterson.

Professor Emeritus M. W. Haskell of the University of California died on January 15, 1948 at the age of eighty-four years. He was a member of the Society from 1899 to 1929.

Mr. A. L. McCarty of Merced, California, died on June 20, 1947. He had been a member of the Society since 1923.

Professor Emeritus A. B. Turner of the College of the City of New York died on February 5, 1948 at the age of seventy-five years.

Professor G. E. Wahlin of the University of Missouri died on February 11, 1948 at the age of sixty-eight years. He had been a member of the Society for thirty-nine years.

The following one hundred two doctorates, with mathematics,

mathematical physics, or statistics as a major subject, were conferred during 1947 in universities in the United States and Canada. The university, month in which degree was conferred, minor subject (other than mathematics) and the title of the dissertation are given in each case if available.

D. M. Adelman, California, June, *Some arithmetic properties of sequences of integers satisfying linear recursion relations.*

E. J. Akutowicz, Harvard, September, *The third iterate of the Laplace transform.*

H. L. Alder, California, June, *The existence and nonexistence of certain identities in the theory of partitions.*

H. P. Atkins, Rochester, June, *On fractional derivatives of univalent functions and bounded functions.*

Jacob Bearman, Minnesota, August, *Rotations in the product of two Wiener spaces.*

A. L. Blakers, Princeton, February, *Some relations between homology and homotopy sequences.*

J. V. Breakwell, Harvard, June, *An approximate method of calculating the energy levels of configurations $l^k l'$ in complex spectra.*

F. L. Brown, Notre Dame, June, *Remarks concerning tri-operational algebra.*

R. C. Buck, Harvard, September, *Uniqueness, interpolation, and characterization theorems for functions of exponential type.*

W. C. Carter, Harvard, September, *On the cohomology theory of fields.*

Abraham Charnes, Illinois, June, minor in physics, *Wing-body interaction in linear supersonic flow.*

Y. S. Chin, Harvard, September, *Curve systems covering a surface.*

K. L. Chung, Princeton, June, *On the maximum partial sums of sequences of independent random variables.*

E. L. Cohen, Duke, June, minor in philosophy, *Sums of an even number of squares in $GF[p^n, x]$.*

Richard Cohn, Columbia, June, *Properties of the limit of the ratio of arc to chord.*

S. L. Crump, Iowa State, June, minor in genetics, *The estimation of components of variance in multiple classifications.*

D. A. Darling, California Institute of Technology, June, minor in physics, *Continuous stochastic processes.*

H. F. DeBaggis, Notre Dame, June, *Hyperbolic geometry.*

S. P. Diliberto, Princeton, June, *Reducation theorems for systems of linear differential equations.*

W. W. Dolan, Oklahoma, June, minor in physics, *Metric differential geometry of reciprocal rectilinear congruences.*

Mary P. Dolciani, Cornell, June, *On the representation of integers by quadratic forms.*

D. B. Duncan, Iowa State, June, minor in genetics, *Significance tests for differences between ranked variates drawn from normal populations.*

H. W. Ellis, Toronto, June, *Mean continuous integrals.*

Bernard Epstein, Brown, June, *A method for the solution of the Dirichlet problem for certain types of domains.*

C. D. Firestone, Cornell, September, *Sufficient conditions for the modelling of axiomatic set theory.*

M. P. Fobes, Harvard, September, *On a conjectured inequality related to the product of Lipschitz skeleton cochains.*

Marianne R. Freundlich, Illinois, October, minor in physics, *On normed rings.*

Irving Gerst, Columbia, February, *On the integration of a certain class of differential equations.*

A. W. Goodman, Columbia, June, *On some determinants related to p-valent functions.*

W. S. Gustin, California (Los Angeles), June, I. *A bilinear integral identity for harmonic functions.* II. *Sets of finite planar order.*

Franklin Haimo, Harvard, June, *Division by the integers in Abelian groups.*

Edwin Halfar, Iowa, August, *Reduction of topological operators and their canonical representation.*

G. J. Haltiner, Wisconsin, September, *On the theory of linear differential systems when based upon a new definition of the adjoint.*

T. E. Harris, Princeton, June, *Some theorems on the Bernoullian multiplicative process.*

A. R. Harvey, Harvard, June, *Some studies on functions of exponential type.*

Sister M. Agnes Hatke, Purdue, June, minor in physics, *A certain cumulative probability function.*

I. R. Hershner, Harvard, June, *The moduli of univalence and of p-valence of functions analytic in the unit circle.*

I. I. Hirschman, Harvard, June, *Some representation and inversion problems for the Laplace transform.*

Marshall Holt, Pittsburgh, June, minor in engineering, *A study of the beam column problem.*

W. N. Huff, Pennsylvania, February, *On the type of polynomials generated by* $f(xt)\phi(t)$.

P. B. Johnson, California Institute of Technology, June, minor in physics, *Some applications of functional analysis to parallel displacement in Riemannian geometry.*

W. C. Kalinowski, St. Louis, August, minor in physics, *A postulational treatment of the probability for certain types of emissions.*

L. H. Kanter, Stanford, October, *On the zeros of orthogonal polynomials and the related Christoffel numbers.*

Samuel Karlin, Princeton, June, *Independent functions.*

J. R. F. Kent, Illinois, October, minor in physics, *Separation theorems for differential equations of the third and fourth order.*

J. H. Laning, Massachusetts Institute of Technology, September, minor in physics, *Mathematical theory of lubrication type-flow.*

E. H. Larguier, Michigan, June, *Homology bases with applications to local connectedness.*

W. G. Leavitt, Wisconsin, May, *A normal form for matrices whose elements are holomorphic functions.*

J. S. Leech, Yale, June, *On convex sets in complex Banach spaces.*

K. B. Leisenring, Michigan, June, *Hyperbolic geometry and trigonometry on the completed Lambert sphere.*

M. M. Lemme, Purdue, June, *On a new cumulative frequency function.*

W. J. LeVeque, Cornell, September, *On the distribution of values of number-theoretic functions.*

Sister M. Teresine Lewis, Catholic University, June, minor in physics and education, *The construction and application of magic rectangles modulo p for small values of p.*

P. J. McCarthy, Princeton, February, *Approximate solutions for means and variances in a certain class of box problems.*

W. R. McEwen, Minnesota, March, minor in physics, *An upper bound for the number of orthogonal polynomials of any specified degree associated with an algebraic curve in space.*

A. M. Mark, Cornell, September, *Limit theorems in the theory of probability.*

F. J. Massey, California, June, *Estimation of a distribution function by confidence limits.*

C. W. Mathews, Illinois, June, minor in physics, *Cauchy type integral representation for functions of a complex variable.*

B. E. Meserve, Duke, June, minor in physics, *Inequalities of higher degree.*

W. H. L. Meyer, Chicago, December, *Multiple integral problems involving n dependent functions in the calculus of variations.*

E. E. Moise, Texas, June, *An indecomposable plane continuum which is homeomorphic to each of its nondegenerate subcontinua.*

B. N. Moyls, Harvard, September, *Extensions of valuations with prescribed value groups and residue class fields.*

Sigurd Mundhjeld, Nebraska, August, minor in physics, *On certain doubly periodic functions of the third kind.*

W. D. Munro, Minnesota, March, minor in physics, *Orthogonal trigonometric sums with auxiliary conditions.*

M. L. Nelson, California, February, *An Abel integral equation with constant limits of integration.*

Paul Olum, Harvard, June, *Homology with operators and mapping theory.*

T. G. Ostrom, Minnesota, June, minor in physics, *The solution of linear integral equations by means of Wiener integrals.*

L. J. Paige, Wisconsin, May, *Neofields.*

N. H. Painter, Massachusetts Institute of Technology, February, minor in physics, *Application of Lagrangian procedures to a wave guide attenuator.*

S. T. Parker, Cincinnati, June, *Convergence factor and regularity theorems for convergent integrals.*

Harry Polachek, Columbia, February, *Stirling's series.*

D. H. Potts, California Institute of Technology, June, minor in physics, *Mean value derivatives.*

F. M. Pulliam, Illinois, October, minor in astronomy, *Existence of a two-dimensional potential flow with wake past a symmetric convex profile.*

Irving Reiner, Cornell, June, *A generalization of Meyer's theorem.*

J. O. Reynolds, North Carolina, August, *On the irreducibility of certain polynomials.*

R. A. Rosenbaum, Yale, June, *Sub-additive functions.*

Pierre Samuel, Princeton, June, *Ultrafilters and compactification of uniform spaces.*

W. R. Scott, Ohio State, June, *On essentially absolutely continuous transformations.*

Mary A. Seybold, Illinois, October, minor in education, *Isomorphism groups of metabelian groups generated by four independent operators of order p.*

E. B. Shanks, Illinois, October, minor in education, *Homothetic correspondences between Riemannian spaces.*

H. N. Shapiro, Princeton, June, *On the iterates of arithmetic functions.*

W. H. Simons, California, September, *Modular functions of stufe* 2.

S. S. Shü, Brown, June, *On the method of successive approximations applied to compressible flow problems.*

E. H. Spanier, Michigan, June, *Cohomology theory for general spaces.*

M. D. Springer, Illinois, June, minor in economics, *Joint sampling distribution of mean and standard deviation for a chi-square universe.*

F. M. Stewart, Harvard, September, *Non-commutative integration and abstract differential equations.*

W. M. Stone, Iowa State, June, minor in physics and theoretical mechanics, *The generalized Laplace transformation with applications to problems involving finite differences.*

L. W. Swanson, Minnesota, August, minor in physics, *Solutions of certain differential equations associated with the theory of orthogonal polynomials.*

J. D. Swift, California Institute of Technology, June, minor in physics, *Periodic functions over fields of characteristic p.*

D. L. Thomsen, Massachusetts Institute of Technology, September, minor in aeronautical engineering, *On the separation of variables in the two-dimensional scalar Helmholtz equation.*

Hing Tong, Columbia, June, *The elements of the theory of transfinite numbers.*

E. A. Trabant, California Institute of Technology, June, minor in physics, *Application of the tensor calculus to problems arising in dynamics.*

L. B. Tuckerman, Princeton, June, *The embedding of products and joins of complexes in Euclidean space.*

D. F. Votaw, Princeton, June, *Testing compound symmetry in a normal multivariate distribution.*

N. A. Wiegmann, Wisconsin, May, *The theory of normal matrices with some analogs of the generalized principal axis transformation.*

Albert Wilansky, Brown, June, *An application of Banach linear functionals to the theory of summability.*

Margaret Willerding, St. Louis, June, minor in physics, *The determination of all classes of positive quaternary quadratic forms which represent all (positive) integers.*

Christine S. Williams, Yale, June, *A theory of normal chains.*

A. G. Wilson, California Institute of Technology, June, minor in physics, *Axially symmetric thermal stresses in a semi-infinite solid.*

R. L. Wilson, Wisconsin, May, *A finite method for the determination of the Galois group of an equation with an application to the problem of reducibility.*

Miriam L. Yevick, Massachusetts Institute of Technology, September, minor in physics, *Lebesgue density theorem in abstract measure spaces.*

Bertram Yood, Yale, June, *Linear topological algebras.*

The following doctorate was conferred in 1946, but was not in-

cluded in the list in the preceding volume of this Bulletin (vol. 53, pp. 471–474).

Irma R. Moses, Cornell, September, *On the representation in the ring of p-adic integers of a quadratic form in n variables by one in m variables.*