

THE APRIL MEETING IN NEW YORK

The five hundred seventy-eighth meeting of the American Mathematical Society was held on Wednesday through Saturday, April 5–8, 1961 at the Hotel New Yorker in New York City. About 590 persons attended including 425 registrants from the membership of the Society.

A Symposium on Mathematical Problems in the Biological Sciences was held on Wednesday, Thursday, and Friday. The symposium was sponsored by the Army Research Office and the National Science Foundation. The chairman of the Invitations and Steering Committee was Dr. S. M. Ulam and the secretary was Dr. R. E. Bellman. The proceedings of the symposium are to be published under the editorship of Dr. Bellman.

A Symposium on Recursive Function Theory was held on Thursday and on Friday morning. The symposium was supported by project FOCUS of the Institute for Defense Analyses, and in addition was under the auspices of the Association for Symbolic Logic and of the Association for Computing Machinery. The chairman of the organizing committee was Professor S. C. Kleene. The proceedings of the symposium will be published under the editorship of Professor J. C. E. Dekker.

By invitation of the Committee to Select Hour Speakers for Eastern Sectional Meetings, Professor Jacob Wolfowitz of Cornell University addressed the Society on *Coding theorems of information theory* at 2:00 P.M. on Friday. Professor Murray Gerstenhaber presided at the session and introduced the speaker.

By invitation of the same committee, Professor D. M. Kan of the Massachusetts Institute of Technology addressed the Society on *Homotopy groups* at 2:00 P.M. on Saturday. Professor C. C. Hsiung presided at the session and introduced the speaker.

There were nine sessions for contributed papers, including provision for late papers. The session chairmen were Professors C. L. Dolph, Leonard Gillman, H. M. MacNeille, D. J. Newman, J. C. Oxtoby, Arthur Sard, Dr. Samuel Schechter, Dr. William Clare Taylor, and Dr. C. B. Tompkins.

Throughout the meeting, overhead projection equipment was available and was used by most speakers in preference to blackboards and with better effect.

The Council met on Friday, April 7, 1961.

The Secretary announced the election of the following one hundred and fifty-one persons to ordinary membership in the Society:

Mr. T. A. Abouhalkah, Liberal, Kansas;
Mrs. Gratia G. Alkire, Knolls Atomic Power Lab., Schenectady, New York;
Professor Leo Barsotti, University of Parana, Brazil;
Mr. Tamas I. Bartha, University of Illinois;
Mr. Noel S. Bartlett, Standard Oil Co., Cleveland, Ohio;
Mr. Donald Bateman, University of Idaho;
Mr. Jerry E. Belyea, University of Michigan;
Mr. Ralph B. Bennett, University of Tennessee;
Dr. Stanley A. Berger, University of California;
Dr. Dushan Boyanovitch, Stevens Institute of Technology;
Mrs. Zelda S. Brenner, IBM, Philadelphia, Pennsylvania;
Mr. George E. Burdick, General Electric Co., Pittsfield, Massachusetts;
Mr. Oberia E. Burge, Morris Brown College;
Rev. William B. Callen, Syracuse University;
Dr. Sae W. Chang, Korean Research Council, Seaside, California;
Mr. Harry E. Clark, Hercules Powder Co., Wilmington, Delaware;
Mr. Herman J. Clark, Auburn University;
Mr. Richard Coleman, Lockheed Aircraft Corp., Sunnyvale, California;
Mr. Thomas A. Cootz, San Diego State College;
Dr. Leslie Cselle, Shell Oil Co., New York, New York;
Mr. Dennis F. Cudia, University of Illinois;
Professor Gregory L. Curme, Illinois Institute of Technology;
Mr. E. Count Curtis, Massachusetts Institute of Technology;
Mr. William C. Cutler, Stanford Research Institute, Menlo Park, California;
Dr. Richard B. Darst, Massachusetts Institute of Technology;
Mr. Carl-Wilhelm R. de Boor, General Motors Corp., Warren, Michigan;
Mr. Nicholas J. De Lillo, Fordham University;
Professor Frank C. DeSua, Simmons College;
Mr. John E. Diem, Pennsylvania State University;
Mr. Manfredo P. Do Carmo, University of Recife, Brazil;
Mr. E. B. Dynkin, Moscow State University, USSR;
Mr. William B. Easton, Cornell University;
Mr. Carl A. Edstrom, Minneapolis-Honeywell Regulator Co., Minneapolis, Minnesota;
Mr. Julius W. Enig, Naval Ordnance Laboratory, Silver Spring, Maryland;
Mr. Carl F. Evans, Cornell Aeronautical Laboratory, Buffalo, New York;
Mr. Joseph D. Feldman, University of Michigan;
Professor Hans R. Fischer, Montana State College;
Mr. Ralph M. Ford, Auburn University;
Mr. David Fox, Systems Research Group, Inc., Mineola, New York;
Mr. Joseph G. Freudenberger, Systems Analyst, C.I.T., New York, New York;
Professor Raoul M. Freyre, North Carolina State College;
Mr. Walter Gee, RS Electric Corporation, Palo Alto, California;
Mr. Jack B. Goebel, Oregon State College;
Mr. Stuart A. Goldman, Purdue University;
Mr. Samuel M. Good, Atlanta University;
Mr. William B. Gordon, Sugar Grove, West Virginia;
Mr. Louis J. Grimm, University of Minnesota;
Mr. Marvin W. Grossman, University of Illinois;
Mr. U. C. Guha, University of Malaya, Singapore, Malaya;

Mr. Louis A. Hageman, Westinghouse Electric, Pittsburgh, Pennsylvania;
Professor Arthur E. Hallerberg, Valparaiso University;
Professor Robert H. Harvey, Knoxville College;
Dr. Laurence B. Heilprin, Washington, D. C.;
Mr. Samuel M. Hendley, Pittsburgh, Pennsylvania;
Mr. Charles V. Heuer, University of Nebraska;
Mr. William Hosmer, Providence, Rhode Island;
Mr. William J. Jameson, Jr., Iowa State University;
Mr. Arnold P. Jones, Bethesda, Maryland;
Professor Meyer Jordan, Brooklyn College;
Mr. David J. Kaplan, Menlo Park, California;
Mr. Leonard J. Kaplan, New York University;
Mr. Louis F. Karkos, Dallas, Texas;
Professor Irvin W. Kay, New York University;
Dr. Roy P. Kerr, Dayton, Ohio;
Mr. Suhail B. Khleif, The Johns Hopkins University;
Mr. George Kimeldorf, University of Rochester;
Mr. Louis R. Knudtson, Chicago, Illinois;
Miss Emily J. D. Kozakoff, University of Miami;
Mrs. Dorothee E. Krahn, Silver Spring, Maryland;
Dr. Edgar Krahn, Silver Spring, Maryland;
Dr. William H. Kruskal, University of Chicago;
Mr. Ronald B. Ladd, Hartford, Connecticut;
Mr. John B. Lane, University of Vermont;
Mr. Eric S. Langford, Rutgers, The State University;
Mr. Arnold Lapidus, New York University;
Professor Philip J. Laufer, Quebec, Canada;
Miss Linnea E. Laure, Berryville, Virginia;
Professor John W. Layman, Virginia Polytechnic Institute;
Mr. Herbert C. Lebovitz, Lehigh University;
Dr. E. Bruce Lee, Minneapolis, Minnesota;
Professor Norman Levine, Ohio State University;
Dr. Rubens G. Lintz, Instituto de Matematica e Fisica oa Bahia, Brazil;
Professor Donald Livingstone, University of Michigan;
Miss Eleanor J. Macdonald, University of Texas;
Mr. Austin J. Maher, Jr., Long Island City, New York;
Mr. George E. Martin, University of Michigan;
Mr. James R. Massey, Wyandanch, New York;
Mr. Frank McGee, Bellevue, Kentucky;
Mr. Donald M. MacLaren, Harvard University;
Professor Donald E. McLaughlin, Augustana College;
Mr. Malcolm C. McMillan, Los Angeles, California;
Mr. Francis J. McNary, Boston, Massachusetts;
Professor William Miehle, Villanova University;
Miss Judith A. Molinar, Mount Holyoke College;
Mr. George E. Morgan, Jr., Washington, D. C.;
Mr. Thomas A. Morgan, Syracuse University;
Mrs. William L. Morris, Duarte, California;
Mr. Robert E. Murphy, El Paso, Texas;
Mr. Win Myint, Rensselaer Polytechnic Institute;

Mr. Kazutoshi Najita, University of Hawaii;
Professor Sidney D. Nolte, Western Illinois University;
Mr. Armand V. Odierna, Rochester, New York;
Dr. Norman Oler, Columbia University;
Mr. Aaron Paulker, Hunter College;
Mr. Charles H. Pierce, Dallas, Texas;
Mr. James C. T. Pool, State University of Iowa;
Dr. Wenton M. Pritchard, Newport News, Virginia;
Mr. Edward L. Pugh, Santa Monica, California;
Mr. Robert E. Reed, Queens College;
Professor Anna M. Restelli, University of Bocconi, Milano, Italy;
Professor Donald Richter, University of Minnesota;
Mr. Antonio Rodrigues, University Rio Grand do Sul, Brazil;
Mr. Edward K. Rose, Cambridge, Massachusetts;
Mrs. Laurel R. Ruch, Colorado College;
Mr. Sanford R. Schubert, University of Illinois;
Miss Betsy Schumacker, Philadelphia, Pennsylvania;
Mr. Stephen L. Shapiro, Rensselaer Polytechnic Institute;
Mr. Raymond N. Shekoury, State University of Iowa;
Mr. Benjamin T. Sims, Iowa State University;
Professor Michael Skalsky, Southern Illinois University;
Mr. Josef T. Soehakso, Gadjah-Mada University, Indonesia;
Mr. Martin M. Sokoloski, Freeland, Pennsylvania;
Mr. Raj P. Soni, Oregon State College;
Dr. Ronald Stark, New York, New York;
Mr. Seymour Steinberg, Atlanta University;
Mr. Peter J. Stuckey, Chicago, Illinois;
Mr. Howard S. G. Swann, University of Chicago;
Professor Edgar L. Swanson, South Dakota School of Mines and Technology;
Mr. John A. Synowiec, De Paul University;
Mr. Norman Tajen, Pittsfield, Massachusetts;
Mr. Ervie DeA. Thomas, Atlanta University;
Mr. Aleksander M. Topolnicki, Detroit, Michigan;
Mr. Richard L. Townsend, Murray Hill, New Jersey;
Dr. Joe F. Traub, Murray Hill, New Jersey;
Mr. John L. Traub, Wisconsin State College;
Mr. Donald R. Traylor, Auburn University;
Mr. Daniel J. Troy, St. Louis University;
Dr. Victor Twersku, Mt. View, California;
Mr. James D. Vineyard, Atlanta University;
Mr. Rudolph Visnich, Berryville, Virginia;
Mr. Gedalia Volinez, Israel;
Mr. Frederic E. von Ammon, Ft. Lauderdale, Florida;
Mr. Masami Wakae, University of Illinois;
Mr. William J. Walbesser, Buffalo, New York;
Mr. Everett L. Walter, New Mexico State University;
Mr. Morton N. Weindling, Santa Monica, California;
Mr. Keith White, McGill University;
Mr. Richard D. Whittaker, University of Rhode Island;
Professor Wilbur C. Whitten, Jr., Virginia Military Institute;

Mr. Paul J. Wolfe, Davenport, Iowa;
 Mr. Wu Ta Sun, Tulane University;
 Mr. Sik-Sang Yau, University of Illinois;
 Dr. Tom T-P. Yu, Blue Bell, Pennsylvania.

It was reported that sixty-four persons were elected to membership on nomination of institutional members as indicated;

Brooklyn College: Mr. Harry P. Allen.

Polytechnic Institute of Brooklyn: Mr. George Glauberman.

University of California, Berkeley: Mr. Robert E. Williamson;

University of California, Santa Barbara: Mr. John R. Allen.

Calvin College: Mr. Carl T. Verhey.

University of Chicago: Mr. Allan N. da Silva, Mr. Rudolph V. DeSapio, Mr. David Handel.

University of Cincinnati: Mr. Harold G. Mushenheim.

Columbia University: Mr. William W. Adams, Mr. Jerry M. Bank, Mr. Steven B. Bank, Mr. William Brown, Mr. Leonard S. Charlap, Mr. Emile C. Chi, Professor Antal E. Fekete, Mrs. Clare R. Friedman, Mr. Hong W. Kim, Mr. Francis W. Lawvere, Mr. Edward Leibstone, Mr. John H. McAlpin, Mr. Warren L. May, Mr. Peter Mittelman, Mr. Robert A. Prener, Mr. Alan W. Rich, Mr. Mare A. Rieffel, Mr. Edmund B. Staples, III, Mr. Richard Staum, Mr. Myles Tierney, Miss Maureen B. Turner, Mr. Jaak Vilms.

Florida Agricultural and Mechanical University: Mrs. L. B. F. Clarke.

Harvard University: Mr. Thomas P. Dreyer, Mr. George K. Francis, Mr. Roger H. Sanders, Mr. J. Michael Schlessinger, Mr. Charles C. Sims.

University of Idaho: Mr. Newman H. Fisher.

University of Illinois: Mr. Rao S. Channapragada.

Kent State University: Mr. Fritz H. Kaiser.

New York University: Miss Linda G. F. Keen.

Northwestern University: Mrs. Janet L. Fisher, Mr. John B. Lewis, Mr. Aribindi S. Rao.

Ohio Wesleyan University: Miss Alice A. McAllister.

Oregon State College: Mr. Gilbert A. Bachelor, Mr. John J. Kohfeld.

Rensselaer Polytechnic Institute: Mr. Fred G. Gustavson.

College of St. Thomas: Mr. Leonard H. Hauer.

University of Tennessee: Mr. Philip Bacon, Mr. Mohammad Y. Shaikh.

Tulane University: Dr. Karl H. Hoffmann.

Vanderbilt University: Mr. John H. Christy.

University of Washington: Mr. Charles W. Austin, Mr. Keith J. Craswell, Mr. Donald G. DuBeau, Mr. Laurence G. Hoye, Mr. Richard A. Michelson, Mr. Ronald A. Schaufele, Mr. Donald M. Silberger.

Wayne State University: Mr. Erik A. Schreiner.

College of William and Mary: Miss Carolyn H. Le Duc.

Yale University: Mr. M. Rajagopalan.

The Secretary announced that the following had been admitted to the Society in accordance with reciprocity agreements with various mathematical organizations:

Wiskundig Genootschap te Amsterdam: Professor Johan J. de Iongh.

Union Matematica Argentina: Dr. Rafael Panzone, Professor Emilio Roxin.

Société Mathématique de Belgique: Professor Andre Henry, Mr. Julien H. C. Malengreau, Mr. Joseph Nijs.

Chinese Mathematical Society: Professor Fu C. Hsiang, Professor Zee Shen.

Dansk Matematisk Forening: Mr. Erik Balslev, Professor Bent Christiansen, Mr. Gerd Grubb.

Deutsche Mathematiker Vereinigung: Professor Georg Aumann, Mr. Gerhard R. Fauth, Dr. Karl F. Hinderer, Professor Martin L. Kneser, Mr. Walter Oberschelp, Mr. Christoph J. Scriba, Dr. Johann Schroder, Mr. Hans Wasche, Professor Helmut W. Wielandt.

Société Mathématique de France: Mr. Paul-Louis Hennequin, Miss Denise Huet, Mr. Otto H. Kegel, Mr. Alain Ghouila-Houri.

Gesellschaft fuer Angewandte Mathematik und Mechanik: Professor Bozidar D. Jovanovic, Professor Udo Wegner.

Indian Mathematical Society: Mr. T. V. Avadhani, Mr. Jangeshwar Dutta, Professor Vasant S. Huzurbazar, Mr. K. S. Nagaraja, Mr. T. S. Nanjundiah, Mr. A. V. Prasad, Professor B. N. Prasad, Dr. Mathukumalli V. Subbarao, Professor K. Venkatachaliengar.

Mathematical Society of Japan: Mr. Satoshi Arima, Professor Noboru Ito, Professor Han. Nishimiya, Mr. Sigeru Okamoto, Professor Minoru Tomita, Professor Kazo Tsuji, Professor Kyoichi Yoshinaga.

The London Mathematical Society: Professor Frederick V. Atkinson, Professor D. P. Banerjee, Professor Laszlo' G. Kova'cs, Professor Ramanath Mohanty, Professor Roger Penrose, Dr. Barry Spain, Dr. Rosalind C. H. Y. Tanner, Dr. Derek R. Taunt.

Osterreichische Mathematische Gesellschaft: Professor Hans Hornich.

Norsk Matematisk Forening: Professor Oddvar Bjorgum.

Polskie Towarzystwo Matematyczne: Dr. Antoni A. Kosinski.

Suomen Matemaattinen Yhdistys: Professor Matti T. Klemola.

Svenska Matematikersamfundet: Professor Stig Ekelof, Prof. Bengt Holmberg.

Sociedad Mathematica Mexicana: Professor Federico C. Velasco.

Unione Matematica Italiana: Mr. Gianantonio Cottafova.

It was reported that William Hart represented the Society at the Inauguration of Owen Meredith Wilson as President of the University of Minnesota; A. D. Wallace at the Inauguration of H. E. Longnecker as President of Tulane University; and N. D. Kazarinoff at the 70th Birthday of Nicholas Muskhelishvili, President of the Academy of Sciences of the Georgian S.S.R.

The following committee appointments of the President were reported: To the *Committee on Applied Mathematics*: David M. Young to be chairman for year 1961; to the *Organizing Committee on Summer Institutes*: R. H. Fox, Leonard Gillman and A. Erdélyi; To the *Translation Committee*: I. E. Segal and E. Hewitt; to the *Committee on Number Theory Proposal*: P. T. Bateman, R. Brauer, D. H. Lehmer, H. Rademacher, and A. Selberg; to the *Translations and Memoirs Committee*: M. M. Loève; to the *Committee to Select Gibbs Lecturer for 1963 and 1964*: E. J. McShane, S. S. Wilks, and I. E. Segal; to the

Committee to Prepare New Authors Manual: E. N. Steenrod, F. A. Ficken, J. L. Doob, G. Piranian, and L. Carlitz; to the *Special Committee on Department of Health, Education and Welfare's Title Four Program*: E. J. McShane, H. F. Bohnenblust, and G. Baley Price; to the *Selection Committee for Expository Articles in the Bulletin*: S. Bochner, L. Bers, R. Brauer, S. Chern, J. L. Doob, E. Hille, H. Rademacher, N. Steenrod, and A. Taylor; to the *Joint Committee on Communication of Mathematical Ideas*: R. H. Bing, C. B. Allendoerfer, W. Givens, A. M. Gleason, and R. C. Prim; to the *ex officio Committee on Place of Meetings*: G. L. Walker; to the *Joint Committee on Arrangements for the Oklahoma Meeting*: L. Wayne Johnson, H. L. Alder, E. A. Hultquist, R. D. McDole, C. E. Marshall, H. S. Mendenhall, G. L. Walker, and J. W. T. Youngs.

The Secretary reported that the following have accepted invitations to deliver Hour Addresses before the Society: Leon Ehrenpreis and Stephen Smale at the Summer Meeting in Stillwater, Oklahoma, in 1961.

The Council voted to hold a symposium on *The Interactions Between Mathematical Research and High-Speed Computing* in connection with the April, 1962, meeting of the Society in the east.

The Council approved a request of the Econometric Society to hold a joint meeting with the Society at Stillwater, Oklahoma, in August, 1961.

The Council discussed the growing problem of the number of Ten-Minute Papers presented at the Annual Winter Meetings of the Society. The Acting Secretary will report in more detail on the recommendations presented to the Associate Secretaries by means of a letter in the Notices.

LOWELL PAIGE,
Acting Secretary
EVERETT PITCHER,
Associate Secretary