May Meeting of the Indiana Section

M. J. Mansfield (Secretary-Treasurer)

29. *Residue classes and string figures*, by A. R. Amir-Moez, Texas Technological College.

30. *The interface between mathematics and statistics*, by P. D. Minton, Southern Methodist University.

J. C. BRADFORD, *Secretary-Treasurer*

MAY MEETING OF THE KENTUCKY SECTION

The fifty-second annual meeting of the Kentucky Section was held at Morehead State University, Morehead, Kentucky, on May 3, 1969, Chairman Billy R. Nail presiding. Seventy persons registered at the meeting, including 48 members of the Association.

At the business meeting these officers were elected: Chairman: Dr. Carl Langenhop, University of Kentucky; Secretary-Treasurer: Dr. A. S. Howard, Eastern Kentucky University; Contest Chairman: Dr. James Simpson, University of Kentucky.

Dr. Gail Young, President of the Association, gave the invited address on *Some Topological Aspects in Analysis*.

In the morning there were two parallel program sessions. One of these, presided over by Prof. L. C. Cooper of Morehead State University, concerned itself with school mathematics. It was addressed by Mr. Russell Boyd, Mathematics Consultant with the State Department of Education, Mrs. Peggy Prater, Chairman, Mathematics Department, Bath County High School, and Dr. Martha Sudduth, University of Kentucky.

At the other session the following papers were presented:

1. *A generalization of a theorem of Kirszbraun on the intersection of convex sets*, by J. H. Wells, University of Kentucky.

2. *On extending the domain of a complex-valued function satisfying a Lipschitz condition*, by T. M. Jenkins, University of Louisville.

3. *Elementary proofs of theorems on weak convergence—linear operators approach*, by Z. Govindarajulu, University of Kentucky.

4. *The intersection projection of orthogonal projections in finite dimensional spaces*, by C. E. Langenhop, University of Kentucky.

5. *The functions quasi-periodic and the nonhomogeneous linear differential equation*, by F. G. Scorsone, Eastern Kentucky University.

6. *Hamiltonian form of the geodesic equations*, by L. E. Bragg, University of Kentucky.

W. H. SPRAGENS, *Secretary-Treasurer*

MAY MEETING OF THE INDIANA SECTION

The spring meeting of the Indiana Section of the MAA was held on May 10, 1969 at the Indianapolis Campus of Purdue University. There were 70 persons in attendance, including 57 members of the Association.

The group was welcomed by Dr. R. C. Sanborn, Assistant Dean for Academic Affairs at the Indianapolis Campus. Professor B. E. Rhoades, Chairman of the Section, presided.

The following program was presented at the morning session:

1. *Bending of a cylindrical shell under a discontinuous load*, by A. K. Naghdi, Purdue University Indianapolis Campus.

2. *Some recent developments in Boolean geometry*, by H. J. Ludwig, Ball State University.

3. *On subsemigroups of groups*, by J. E. Kuczowski, Purdue University Indianapolis Campus.

4. *Qualitative properties of satellite orbits*, by P. C. Loh, Purdue University Indianapolis Campus.

5. *Primal decomposition of ideals in noncommutative rings*, by C. M. Murphy, Purdue University Calumet Campus.

At the business meeting in the afternoon, the Secretary-Treasurer reported that Mr. Stephen Helmreich of Valparaiso University and Mr. Eric Isaacson of Indiana University had each been awarded a one-year membership in the Association in recognition of their achievement in the 29th Putnam Mathematical Competition. Officers for 1969–70 were elected as follows: Chairman, Professor N. B. Haaser, University of Notre Dame; Vice-Chairman, Professor W. C. Swift, Wabash College; Secretary-Treasurer, Professor M. J. Mansfield, Purdue University at Fort Wayne.

Following the business meeting Professor G. S. Young, President of the MAA, addressed the group on "Topology and Analysis."

M. J. MANSFIELD, *Secretary-Treasurer*

MAY MEETING OF THE ROCKY MOUNTAIN SECTION

The fifty-second annual meeting of the Rocky Mountain Section of the MAA was held at the University of Colorado, Boulder, Colorado, on May 9 and 10, 1969. There were 153 persons registered for the meeting, including Professor F. M. Stein of Colorado State University, Sectional Governor, and Professor J. W. Bebernes of the University of Colorado, Section Chairman. The invited address was delivered by Professor V. L. Klee, Jr., of the University of Washington, who spoke on "Shapes of the Future—Unsolved Geometric Problems for Science and Technology." Professor W. E. Briggs, Dean of the College of Arts and Science of the University of Colorado, welcomed the Section at the banquet on Friday evening.

At the business meeting, the Report of the Nominating Committee recommending that the By-Laws of the Section be amended to provide for the election of a Second Vice-Chairman to look after the interests of the junior colleges, was approved. Professor T. D. Cavanagh, Contest Chairman of the Section, reported that 8610 students from 141 high schools participated in the 1968 MAA mathematics contest. Professor Robert McKelvey reported for the High School Lecturer Program inaugurated last year, and his recommendation that the program be continued was approved. The present committee, consisting of Professor Robert McKelvey, University of Colorado, Chairman, Professor W. R. Scott, University of Utah, and Professor Verne Varineau, University of Wyoming, was reappointed to continue the administration of this program.

The following officers were elected: Chairman, Ray Hanna, University of Wyoming, Laramie, Wyoming; First Vice-Chairman, George Stratopoulos, Weber State College, Ogden, Utah; Second Vice-Chairman, James Davis, Mesa Junior College, Grand Junction, Colorado; Secretary-Treasurer, D. J. Sterling, Colorado College, Colorado Springs.

The following papers were read at the meeting:

1. *Construction of projective ideals*, by D. W. Ballew, South Dakota School of Mines and Technology.

2. *A relationship of perfect fields to compact classes*, by A. J. Boes, Colorado School of Mines.

3. *Surfaces in three-dimensional euclidean space*, by C. E. Burgess, University of Utah.

4. *A property of perfect groups*, by Harold Finkelstein, University of Colorado.

5. *Uniform structures from abstract spaces*, by G. C. Gastle, University of Wyoming.

6. *Similarity of normal matrices in $GF(q)$*, by Mrs. Leslie Hanson and A. D. Porter, University of Wyoming.

7. *On uniform distribution of sequences in $GF(q, x)$ and $GF(q, x)$*, by J. H. Hodges, University of Colorado.

8. *Minimum and maximum topological spaces*, by R. E. Larson, University of Colorado.

9. *Perturbation of the poles of the scattering matrix*, by James LaVita, University of Denver.

10. *On computing the dimensions of spaces of automorphic functions*, by G. L. Loudner, South Dakota School of Mines and Technology.

11. *Quasi-local rings with Noetherian filtrations*, by Sylvia Chin-Pi Lu, University of Colorado (Denver Center).