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PREFACE

The American Mathematical Society held its 24th Summer Research Institute at Stanford University from August 2–21, 1976. The topic of the meeting was Algebraic and Geometric Topology. Particular emphasis was placed on Algebraic $K$- and $L$-Theory, Surgery and Surgery Classifying Spaces, Group Actions on Manifolds, and 3 and 4 Manifold Theory.

The organizing committee consisted of Raoul Bott, William Browder (Co-chairman), Pierre Conner, Robion Kirby, Richard Lashof, R. James Milgram (Chairman), Daniel Quillen, and P. Emery Thomas (Co-chairman).

The main lecturers were Raoul Bott, Richard Lashof and Mel Rothenberg, Sylvain Cappell and Julius Shaneson, C. McA. Gordon, Robert Edwards, Allen Hatcher and Jack Wagoner, Wu. C. Hsiang, Max Karoubi, R. James Milgram, Daniel Quillen, Laurence Siebenmann, and C. T. C. Wall.

Special hour lectures were given by Gregory Brumfiel, William Jaco, Robion Kirby, Ronnie Lee, James Lin, Ib Madsen, John Morgan, Robert Oliver, Ted Petrie, P. Emery Thomas, F. Waldhausen, and James West.

There was also a series of problem sessions run by Raoul Bott (foliations), W. C. Hsiang (group actions and surgery), R. Kirby (3 and 4 manifolds), and C. T. C. Wall (algebraic $K$- and $L$-theory).

Among the more active seminars were 3 and 4 manifolds (Kirby), Kervaire invariant (Browder—E. Brown), Homotopy theory (E. Thomas—M. Mahowald), Algebraic $K$- and $L$- theory (J. Wagoner), Group actions (W. C. Hsiang), Foliations (Bott), Geometry of manifolds (L. Siebenmann), and Surgery and surgery classifying spaces (R. Lashof).

These proceedings include write ups of most of the main lectures, as well as selected seminar talks, and most of the problem sessions.

The institute was sponsored by the National Science Foundation under contract number MCS 76–01696.

The organizing committee wishes to thank Dorothy Smith of the American Mathematical Society for her help in running and organizing the conference.

R. JAMES MILGRAM
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