Algebraic and Geometric Topology

PROCEEDINGS OF SYMPOSIA IN PURE MATHEMATICS

VOLUME XXXII — Part 1

ALGEBRAIC AND GEOMETRIC TOPOLOGY

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TABLE OF CONTENTS

Algebraic K- and L-Theory

A. HATCHER, Concordance spaces, higher simple-homotopy theory,
and applications
J. B. WAGONER, Diffeomorphisms, K_2 , and analytic torsion
FRIEDHELM WALDHAUSEN, Algebraic K-theory of topological spaces. I 35 J. P. ALEXANDER, P. E. CONNER and G. C. HAMRICK, Metabolic and
hyperbolic forms
JEAN-CLAUDE HAUSMANN and PIERRE VOGEL, The plus construction and lifting maps from manifolds
inting maps from maintoids
Surgery and its Applications
R. James Milgram, A survey of the classifying spaces associated to
spherical fiberings and surgery
viewpoint
GREGORY BRUMFIEL, Remarks on smoothing theory
C. T. C. Wall, Free actions of finite groups on spheres
C. B. Thomas, Free actions by finite groups on S^3
LOWELL JONES, The nonsimply connected characteristic variety
theorem
JOHN JONES and ELMER REES, Kervaire's invariant for framed manifolds141
YOUN W. LEE, Surgery on diffeomorphism
REINHARD SCHULTZ, Smooth actions of small groups on exotic spheres155
R. J. MILGRAM and I. HAMBLETON, An obstruction to Poincaré
transversality
Group Actions
TED PETRIE, Pseudoequivalences of G-manifolds
R. LASHOF and M. ROTHENBERG, G-smoothing theory
MEL ROTHENBERG, Torsion invariants and finite transformation groups267
M. Davis, W. C. Hsiang and W. Y. Hsiang, Differential actions of
compact simple Lie groups on homotopy spheres and Euclidean
spaces
F. T. FARRELL and W. C. HSIANG, On the rational homotopy groups of
the diffeomorphism groups of discs, spheres, and aspherical
manifolds
ROBERT OLIVER, Group actions on disks, integral permutation repre-
sentations, and the Burnside ring339

TABLE OF CONTENTS

DAN BURGHELEA, Automorphisms of manifolds	347
I. Berstein and J. E. West, Based free compact Lie group actions	
on Hilbert cubes	373
P. E. CONNER and FRANK RAYMOND, Realizing automorphisms of π_1	
by homeomorphisms	393
FRANCIS X. CONNOLLY, Group actions, vector fields, and characteristic	
numbers	401
RAVINDRA S. KULKARNI. Infinite regular coverings and Kleinian groups	407

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 (Cochairman), 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.

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

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