

## Contents

List of Participants	vii
List of Speakers	xi
Preface <i>D. Wehlau and E. Campbell</i>	xiii
A Local Study of Embeddings of Complexity One <i>G. Bousquet and L. Moser-Jauslin</i>	1
Constructive Invariant Theory <i>H. Derksen</i>	11
On Global Degree Bounds for Invariants <i>H. Derksen and Gregor Kemper</i>	37
On Invariant Theory of Finite Groups <i>P. Fleischmann</i>	43
Combinatorics Related to Orbit Closures of Symmetric Subgroups in Flag Varieties <i>Aloysius G. Helminck</i>	71
Deformation of Symmetric Functions and the Rational Steenrod Algebra <i>F. Hirvart and N. M. Thiéry</i>	91
Cohomology with Grosshans Graded Coefficients <i>W. van der Kallen</i>	127
The Module Structure of a Group Action on a Polynomial Ring: Examples, Generalizations, and Applications <i>D. B. Karagueuzian and P. Symonds</i>	139
An Invariant Theoretic Description of the Primitive Elements of the mod $-p$ Cohomology of a Finite Loop Space which Are Annihilated by Steenrod Operations <i>N. E. Kechagias</i>	159
On Noether's and Weyl's Bound in Positive Characteristic <i>F. Knop</i>	175
Comparing the Depths of Rings of Invariants <i>M. D. Neusel</i>	189

Moment Polytopes of Nilpotent Orbit Closures; Dimension and Isomorphism of Simple Modules; and Variations on the Theme of J. Chipalkatti <i>V. L. Popov</i>	193
Compressions of Group Actions <i>Z. Reichstein</i>	199
Commutativity of Weakly Commutative Riemannian Homogeneous Spaces <i>L. G. Rybnikov</i>	203
Group Actions and Quotients for Compact Lie Groups and Algebraic Groups <i>G. W. Schwarz</i>	209
Notes on Invariant Rings of Divided Powers <i>J. Segal</i>	229
Classical Covariants and Modular Invariants <i>R. J. Shank</i>	241
Classification of Nearly Closed Orbits for the Action of Semisimple Complex Linear Groups on the Projective Spaces <i>A. V. Smirnov</i>	251
Convex Cones and SAGBI Bases of Permutation Invariants <i>N. M. Thiéry and S. Thomassé</i>	259
Some Problems in Invariant Theory <i>D. L. Wehlau</i>	265
The Peterson Conjecture for Algebras of Invariants <i>R. M. W. Wood</i>	275
Weakly Symmetric and Weakly Commutative Spaces <i>O. Yakimova</i>	281