

TABLE OF CONTENTS

Foreword		iii
Main Lectures		iv
Special Sessions		v
List of Participants		vii
J. BACKELIN	Matrix factorizations of homogeneous polynomials	1
J. HERZOG		
H. SANDERS		
L.A. BOKUT'	Some new results in the combinatorial theory of rings and groups	34
K. BUZÁSI	On representations of infinite groups	44
J.A. CARLSON	Integral manifolds, harmonic mappings, and the abelian subspace problem	60
D. TOLEDO		
P.M. COHN	Valuations on free fields	75
E.S. GOLOD	Standard bases and homology	88
T. JÓZEFIAK	Semisimple superalgebras	96
A.N. KRASIL'NIKOV	On the laws of finite dimensional representations of solvable Lie algebras and groups	114
A.L. ŠMEL'KIN		130
G.A. MARGULIS	Lie groups and ergodic theory	130
B.I. PLOTKIN	Galois theory of databases	147
A. REGEV	On the codimensions of matrix algebras	162
J.-E. ROOS	Homology of free loop spaces, cyclic homology, and non-rational Poincaré-Betti series in commutative algebra	173
A. TIETAVAINEN	Incomplete sums and two applications of Deligne's result	190
A.E. ZALESSKII	Eigenvalues of matrices of complex representations of finite groups of Lie type	206
G. ZAPPA	Normal Fitting classes of groups and generalizations	219
E.I. ZEL'MANOV	On the nilpotency of nil algebras	227