Table of Contents

Introduction vii

List of participants xiii

Part I Optimal factorization of matrices, length problems

I.1 Classical groups
E.W. Ellers 1

I.2 Generators of automorphism groups of modules
H. Ishibashi 47

I.3 Generators of automorphism groups of Cayley algebras
H. Lausch 69

I.4 Products of matrices
T.J. Laffey 95

Part II Reflection geometry

II.1 Reflection groups - On pre-Hjelmslev groups and related topics
F. Knüppel 125

II.2 Unitary geometry
M. Götzky 165

II.3 Lie and algebraic Johnsen groups
P. Plaumann 179

Part III Nice generators and relations, applications

III.1 2-Generation of finite simple groups and some related topics
L. Di Martino-M.C. Tamburini 195

III.2 Coxeter groups and three related topics
A.M. Cohen 235

III.3 Geometric structure of conjugacy classes in algebraic groups
T.A. Springer 279

III.4 Groups with polynomial growth and differential geometry
E. Musso-F. Tricerri 291

III.5 Analyticity and growth of pro p-groups
A. Caranti 321

III.6 Intersections of local algebraic extensions of a Hilbertian field
M. Jarden 343

III.7 Generators and relations for discontinuous groups
B. Zimmermann 407

Index 437