Table of contents

Prefacev
Christine Altseimer and Alexandre V. Borovik Probabilistic recognition of orthogonal and symplectic groups
Roberto M. Avanzi, Mathias Kratzer and Gerhard O. Michler Janko's simple groups J ₂ and J ₃ are irreducible subgroups of SL ₈₅ (5) with equal centralizers of an involution
László Babai and Aner Shalev Recognizing simplicity of black-box groups and the frequency of <i>p</i> -singular elements in affine groups
Robert Beals Improved algorithms for the Tits alternative
Peter A. Brooksbank A constructive recognition algorithm for the matrix group $\Omega(d, q) \dots \dots \dots 79$
Peter A. Brooksbank and William M. Kantor On constructive recognition of a black box $PSL(d, q)$
Marston Conder and Charles R. Leedham-Green Fast recognition of classical groups over large fields
Gene Cooperman Parallel GAP: Mature interactive parallel computing
Bettina Eick Computing with infinite polycyclic groups
Bettina Eick and Alexander Hulpke Computing the maximal subgroups of a permutation group I
Robert M. Guralnick and Frank Lübeck On <i>p</i> -singular elements in Chevalley groups in characteristic <i>p</i>
George Havas and Colin Ramsay Experiments in coset enumeration

viii Table of content	ts
-----------------------	----

George Havas, Leonard H. Soicher and Robert A. Wilson A presentation for the Thompson sporadic simple group
Derek F. Holt Computing automorphism groups of finite groups
Christoph Köhler and Herbert Pahlings Regular orbits and the $k(GV)$ -problem
Charles R. Leedham-Green The computational matrix group project
Frank Lübeck Finding <i>p</i> '-elements in finite groups of Lie type
Alexei D. Miasnikov and Alexei G. Myasnikov Balanced presentations of the trivial group on two generators and the Andrews–Curtis conjecture
Takunari Miyazaki Deterministic algorithms for management of matrix groups
Peter M. Neumann Nearly simple matrix groups: desiderata and suggestions
Peter M. Neumann and Cheryl E. Praeger Cyclic matrices and the MEATAXE
Igor Pak What do we know about the product replacement algorithm?
Charles C. Sims On the complexity of the endomorphism problem for free groups
Talks
List of participants