

# Table of Contents for COLL/63

## Geometric Group Theory

- Geometry and topology
- Metric spaces
- Differential geometry
- Hyperbolic space
- Groups and their actions
- Median spaces and spaces with measured walls
- Finitely generated and finitely presented groups
- Coarse geometry
- Coarse topology
- Ultralimits of metric spaces
- Gromov-hyperbolic spaces and groups
- Lattices in Lie groups
- Solvable groups
- Geometric aspects of solvable groups
- The Tits alternative
- Gromov's theorem
- The Banach-Tarski paradox
- Amenability and paradoxical decomposition
- Ultralimits, fixed point properties, proper actions
- Stallings's theorem and accessibility
- Proof of Stallings's theorem using harmonic functions
- Quasiconformal mappings
- Groups quasiisometric to  $\mathbb{H}^n$
- Quasiisometries of nonuniform lattices in  $\mathbb{H}^n$
- A survey of quasiisometric rigidity
- Appendix: Three theorems on linear groups
- Bibliography
- Index