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Edited by C. M. Campbell, E. F. Robertson, N. Ruskuc and G. C. Smith

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INTRODUCTION

An international conference Groups St Andrews 1997 in Bath was held on the campus of the University of Bath during the period 26 July – 9 August 1997. Some 299 mathematicians from 41 countries were involved in the meeting, as well as 82 family members and partners. This was the fifth meeting of the four-yearly Groups St Andrews Conferences, and the series continues to flourish. The shape of the conference was similar to the previous conferences in that the first week was dominated by five series of talks, each surveying an area of rapid contemporary development in group theory. The main speakers were Laszlo Babai (Chicago), Martin Bridson (Oxford), Chris Brookes (Cambridge), Cheryl Praeger (Western Australia) and Aner Shalev (Jerusalem). The second week featured two special days, a Burnside Day and a Lyndon Day. Our thanks are due to Efim Zelmanov (Yale) and Chuck Miller III (Melbourne), respectively, for helping organise the programmes for these days. In addition the week contained a wide variety of research talks. In the evenings throughout the conference, and during the rest periods, there was an extensive social programme, only some of which was disrupted by rain. There was also much extemporised music-making in the Senior Common Room in the evenings.

These Proceedings contain the written evidence of the academic achievements of the conference. The five main speakers have all provided substantial survey articles, giving a wide perspective on their fields. In the case of Laszlo Babai, the article is written jointly with Bob Beals (Arizona), one of the invited speakers of the second week. Sixteen other papers in these Proceedings are written by authors who gave one hour invited lectures. A rigorous journal-style refereeing process was applied to all the research articles and survey articles submitted for publication in the Proceedings.

Less easy to quantify, but much more important, were the exchanges of ideas and joint work that was done, both at the conference and as a result of meetings at the conference. As the largest regular meeting on group theory in the world, this series has provided a continuing stimulus to research in group theory.

There are many who helped to make the conference a memorable occasion; in particular we thank Mrs Nada Harvey for secretarial assistance, and Mr John McDermott, Mr Aaron Wilson and many other students from the Department of Mathematical Sciences of the University of Bath whose help in the day to day running of the conference was invaluable. Many of Geoff Smith's colleagues from the academic staff of the Department of Mathematical Sciences gave valuable help and we particularly thank Professor John Toland for guidance on conference organization, and Dr Fran Burstall for $\text{T}_{\text{E}}\text{X}$ and $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ assistance to the the conference and its newspaper, The Daily Group Theorist.

We record our thanks also to the then Head of School, Professor Alastair Spence, and to the Pro-Vice Chancellor, Professor I M Jamieson, for smoothing the path of the conference organization. For her constructive attitude and industrious work with the conference accommodation we thank Marian Short from the conference office of the University of Bath.

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INTRODUCTION

It is a pleasure to acknowledge the excellent level of support we received from various funding bodies. The Edinburgh Mathematical Society and the London Mathematical Society provided financial help which defrayed the main speakers' travel, registration and accommodation expenses. The London Mathematical Society additionally sponsored three visitors from Moscow State University, Professor A. Yu. Ol'shanskii, and two research students Ivan Arzhantsev and Gulnara Arzhantseva. This funding provided support for travel, accommodation, conference fees and subsistence. The Royal Society of London treated the conference as two meetings, because of its exceptional size, and because it is held only once in four years. They therefore generously supported four visitors from the former Soviet Union.

We also gratefully acknowledge the financial support from the University of Bath Initiative Fund, the Department of Mathematics of the University of Bath and the School of Mathematical and Computational Sciences of the University of St Andrews. We thank the Bath and North-East Somerset Council for hosting a civic reception at the Roman Baths. Finally, it is a pleasure to thank Olga Tabachnikova both for her assistance in countless aspects of conference organization, and for the loan of Geoff Smith.

Colin Campbell
Ed Robertson
Nik Ruškuc
Geoff Smith