

## Contents of Volume 1

|   |    |
|---|----|
| Introduction . . . . .  | xi |
| Permutability and subnormality in finite groups<br><i>M J Alejandre, A Ballester-Bolinches,</i><br><i>R Esteban-Romero &amp; M C Pedraza-Aguilera . . . . .</i> | 1  |
| (Pro)-finite and (topologically) locally finite groups<br>with a CC-subgroup<br><i>Z Arad &amp; W Herfort . . . . .</i>   | 6  |
| Table algebras generated by elements of small degrees<br><i>Z Arad &amp; M Muzychuk . . . . .</i>   | 12 |
| Subgroups which are a union of a given number of<br>conjugacy classes<br><i>A R Ashrafi &amp; H Sahraei . . . . .</i>   | 22 |
| Some results on finite factorized groups<br><i>A Ballester-Bolinches, J Cossey, X Guo</i><br><i>&amp; M C Pedraza-Aguilera . . . . .</i>                        | 27 |
| On nilpotent-like Fitting formations<br><i>A Ballester-Bolinches, A Martínez-Pastor,</i><br><i>M C Pedraza-Aguilera &amp; M D Pérez-Ramos . . . . .</i>         | 31 |
| Locally finite groups with $\min-p$ for all primes $p$<br><i>A Ballester-Bolinches &amp; T Pedraza . . . . .</i>  | 39 |
| Quasi-permutation representations of 2-groups of<br>class 2 with cyclic centre<br><i>H Behravesht . . . . .</i>   | 44 |

|   |     |
|---|-----|
| Groups acting on bordered Klein surfaces with maximal symmetry<br><i>E Bujalance, F J Cirre &amp; P Turbek</i> . . . . .                        | 50  |
| Breaking points in subgroup lattices<br><i>G Calugareanu &amp; M Deaconescu</i> . . . . .   | 59  |
| Group actions on graphs, maps and surfaces with maximum symmetry<br><i>M D E Conder</i> . . . . .   | 63  |
| On dual pronormal subgroups and Fitting classes<br><i>A D'Aniello &amp; M D Pérez-Ramos</i> . . . . .   | 92  |
| $(p, q, r)$ -generations of the sporadic group O'N<br><i>M R Darafsheh, A R Ashrafi &amp; G A Moghani</i> . . . . .                             | 101 |
| Computations with almost-crystallographic groups<br><i>K Dekimpe &amp; B Eick</i> . . . . .   | 110 |
| Random walks on groups: characters and geometry<br><i>P Diaconis</i> . . . . .  | 120 |
| On distances of 2-groups and 3-groups<br><i>A Drápal</i> . . . . .  | 143 |
| Zeta functions of groups: the quest for order versus the flight from ennui<br><i>M P F du Sautoy</i> . . . . .                                  | 150 |
| Some factorizations involving hypercentrally embedded subgroups in finite soluble groups<br><i>L M Ezquerro &amp; X Soler-Escrivà</i> . . . . . | 190 |
| Elementary theory of groups<br><i>B Fine, A M Gaglione, A G Myasnikov, G Rosenberger &amp; D Spellman</i> . . . . .                             | 197 |
| Andrews-Curtis and Todd-Coxeter proof words<br><i>G Havas &amp; C Ramsay</i> . . . . .  | 232 |

|  |     |
|--|-----|
| CONTENTS: VOLUME 1   | vii |
| Short balanced presentations of perfect groups<br><i>G Havas &amp; C Ramsay</i> . . . . .                        | 238 |
| Finite $p$ -extensions of free pro- $p$ groups<br><i>W Herfort &amp; P A Zalesskii</i> . . . . .                 | 244 |
| Elements and groups of finite length<br><i>M Herzog, P Longobardi &amp; M Maj</i> . . . . .                      | 249 |
| Logged rewriting and identities among relators<br><i>A Heyworth &amp; C D Wensley</i> . . . . .                  | 256 |
| A characterization of $F_4(q)$ where $q$ is an odd prime power<br><i>A Iranmanesh &amp; B Khosravi</i> . . . . . | 277 |
| On associated groups of rings<br><i>Y B Ishchuk</i> . . . . .  | 284 |

## Contents of Volume 2

|  |     |
|--|-----|
| Introduction . . . . .   | xi  |
| Gracefulness, group sequencings and graph factorizations<br><i>G Kaplan, A Lev &amp; Y Roditty</i> . . . . . | 295 |
| Orbits in finite group actions<br><i>T M Keller</i> . . . . .  | 306 |
| Groups with finitely generated integral homologies<br><i>D H Kochloukova</i> . . . . .                       | 332 |
| Invariants of discrete groups, Lie algebras and pro- $p$ groups<br><i>D H Kochloukova</i> . . . . .          | 344 |
| Groups with all non-subnormal subgroups of finite rank<br><i>L A Kurdachenko &amp; P Soules</i> . . . . .    | 366 |
| On some infinite dimensional linear groups<br><i>L A Kurdachenko &amp; I Y Subbotin</i> . . . . .            | 377 |
| Groups and semisymmetric graphs<br><i>S Lipschutz &amp; Ming-Yao Xu</i> . . . . .                            | 385 |
| On the covers of finite groups<br><i>M S Lucido</i> . . . . .  | 395 |
| Groupland<br><i>O Macedońska</i> . . . . .   | 400 |
| On maximal nilpotent $\pi$ -subgroups<br><i>J Medina</i> . . . . .   | 405 |

|   |     |
|---|-----|
| CONTENTS: VOLUME 2  | ix  |
| Characters of $p$ -groups and Sylow $p$ -subgroups<br><i>A Moretó</i> . . . . .   | 412 |
| On the relation between group theory and loop theory<br><i>M Niemenmaa</i> . . . . .                                    | 422 |
| Groups and lattices<br><i>P P Pálffy</i> . . . . .  | 428 |
| Finite generalized tetrahedron groups with a cubic relator<br><i>G Rosenberger, M Scheer &amp; R M Thomas</i> . . . . . | 455 |
| Character degrees of the Sylow $p$ -subgroups of<br>classical groups<br><i>J Sangroniz</i> . . . . .                    | 487 |
| Character correspondences and perfect isometries<br><i>L Sanus</i> . . . . .  | 494 |
| The characters of finite projective symplectic group<br>$PSp(4, q)$<br><i>M A Shahabi &amp; H Mohtadifar</i> . . . . .  | 496 |
| Exponent of finite groups with automorphisms<br><i>P Shumyatsky</i> . . . . .   | 528 |
| Classifying irreducible representations in characteristic zero<br><i>A Turull</i> . . . . .                             | 537 |
| Lie methods in group theory<br><i>M R Vaughan-Lee</i> . . . . .   | 547 |
| Chevalley groups of type $G_2$ as automorphism<br>groups of loops<br><i>P Vojtěchovský</i> . . . . .                    | 586 |