

Preface

of

Ischia Group Theory 2014

The sixth conference in the series Ischia Group Theory took place on the island of Ischia (Naples, Italy) in April 1st-5th, 2014. The Conference was held regularly every other year, so far, and it has met the increasing interest of the mathematical community. The number of participants has grown through the years: this sixth edition of the conference has involved almost 160 participants from 25 countries.

The scientific committee, formed by Mariagrazia BIANCHI (Università di Milano), Patrizia LONGOBARDI (Università di Salerno), Mercede MAJ (Università di Salerno), and Carlo Maria SCOPPOLA (Università dell'Aquila), teamed up with the organizing committee at Università di Salerno, namely Costantino DELIZIA, Maurizio MERIANO, Chiara NICOTERA, Antonio TORTORA, Maria TOTA.

The first three issues of this volume contain the papers contributed by the main speakers and by the other participants, covering a wide variety of topics. They include character theory, finitary symmetric groups, free polynomial algebras, conjugacy, quasnormality and subnormality in group theory, groups of infinite rank, locally graded groups, semigroups of cellular automata, Kazhdan-Lusztig cells, profinite groups, factorization of finite groups, central endomorphisms, a Sandwich classification theorem, finite simple groups of low rank. These Proceedings also contain a list of all the talks, and a list of all the participants.

A day of the conference (April 3rd) was devoted to honor the memory of David Chillag, and another day (April 5th) was dedicated to the memory of Brian Hartley (on the 20th anniversary of his death).

An interesting poster session was shown during each day of the conference, and attracted the attention of many participants.

The great and efficient effort of the team of the University of Salerno resulted in a pleasant and smooth stay for all the participants: we thank them all warmly.

All the speakers delivered talks of the highest quality. We thank them, as well as all the other participants, whose contribution to the concentrate and yet pleasant atmosphere of the conference was essential.

A special thank is due to all the authors of the papers contained here, for their remarkable work, and to the referees, for their excellent and careful selection.

We thank Alireza Abdollahi and the International Journal of Group Theory for publishing these Proceedings.

The kind and efficient staff of the Grand Hotel delle Terme Re Ferdinando should be also acknowledged, for their patience in helping participants in all their needs.

Last but not least, our Sponsors deserve a special thank: their contribution was essential for the organization of the meeting. They are all listed in the next page.

The Editors

Mariagrazia BIANCHI, Patrizia LONGOBARDI, Mercede MAJ, Carlo Maria SCOPPOLA

Sponsors of Ischia Group Theory 2014

INdAM – GNSAGA

Istituto Nazionale di Alta Matematica “F. Severi”

Gruppo Nazionale per le Strutture Algebriche, Geometriche e le loro Applicazioni

Dipartimento di Fisica “E. R. Caianiello”

dell’Università di Salerno

Dipartimento di Matematica

dell’Università di Salerno

Dipartimento di Matematica e Applicazioni “R. Caccioppoli”

dell’Università di Napoli “Federico II”

Dipartimento di Matematica “F. Enriques”

dell’Università di Milano

Dipartimento di Matematica Pura ed Applicata

dell’Università dell’Aquila

Università degli Studi di Salerno

Participants of Ischia Group Theory 2014

Alireza Abdollahi, *University of Isfahan, Iran*
a.abdollahi@math.ui.ac.ir

Cristina Acciarri, *University of Brasilia, Brazil*

Sergei Adyan, *Steklov Mathematical Institute, Russia*
sia@mi.ras.ru

Bernhard Amberg, *Johannes-Gutenberg University, Germany*
amberg@mathematik.uni-mainz.de

Zvi Arad, *Bar-Ilan University, Israel*
aradtzvi@math.biu.ac.il

Elisa Baccanelli, *Università di Milano-Bicocca, Italy*
e.baccanelli@campus.unimib.it

Paul Baginski, *Fairfield University, U.S.A.*

M. Welleda Baldoni, *Università di Roma "Tor Vergata", Italy*
baldoni@mat.uniroma2.it

Evgenii Bashkirov, *Fatih University, Turkey*
ebashkirov@fatih.edu.tr

Raimundo Bastos, *University of Brasilia, Brazil*
bastos@mat.unb.br

Mariagrazia Bianchi, *Università di Milano, Italy*
mariagrazia.bianchi@unimi.it

Russell Blyth, *Saint Louis University, U.S.A.*
blythrd@slu.edu

Mounia Bouchelaghem, *University Ferhat Abbas of Setif, Algeria*

Rolf Brandl, *Universität Würzburg, Germany*

Julian Brough, *University of Cambridge, U.K.*

Roger Bryant, *University of Manchester, U.K.*
roger.bryant@manchester.ac.uk

Rachel Camina, *University of Cambridge, U.K.*
R.D.Camina@dpmms.cam.ac.uk

Andrea Caranti, *Università di Trento, Italy*
caranti@science.unitn.it

Ilaria Castellano, *Università di Bari, Italy*
ilaria.castellano@uniba.it

Tullio Ceccherini-Silberstein, *Università del Sannio, Italy*
tceccher@mat.uniroma3.it

Maria Rosaria Celentani, *Università di Napoli "Federico II", Italy*
mariarosaria.celentani@unina.it

Nela Chillag, *Haifa, Israel*

Ilaria Colazzo, *Università del Salento, Italy*

Gabriella Corsi, *Firenze, Italy*

Ana Costa da Silva, *Ghent University, Belgium*

Eleonora Crestani, *Università di Padova, Italy*

Alma D'Aniello, *Università di Napoli "Federico II", Italy*
daniello@unina.it

Francesca Dalla Volta, *Università di Milano-Bicocca, Italy*
francesca.dallavolta@unimib.it

Ulderico Dardano, *Università di Napoli "Federico II", Italy*
dardano@unina.it

Maria De Falco, *Università di Napoli "Federico II", Italy*
maria.defalco@unina.it

Francesco de Giovanni, *Università di Napoli "Federico II", Italy*
degiovan@unina.it

Anna Valentina De Luca, *Università di Napoli "Federico II", Italy*
annavalentina.deluca@unina.it

Khadra Dekkar, *Bordj Bou-Arreidj University, Algeria*
k.dekkar@univ-bba.fr

Costantino Delizia, *Università di Salerno, Italy*
cdelizia@unisa.it

Eloisa Detomi, *Università di Padova, Italy*
detomi@math.unipd.it

Giovanna Di Grazia, *Università di Napoli "Federico II", Italy*
giovanna.digrazia@unina.it

Friederike Dittberner, *De Gruyter*
friederike.dittberner@degruyter.com

Martyn Dixon, *University of Alabama, U.S.A.*
mdixon@gp.as.ua.edu

Martin Evans, *University of Alabama, U.S.A.*
mevans@as.ua.edu

Gustavo Fernández-Alcober, *University of the Basque Country, Spain*
gustavo.fernandez@ehu.es

Agota Figula, *University of Debrecen, Hungary*
figula@science.unideb.hu

Carla Fiori, *Università di Modena e Reggio Emilia, Italy*
carla.fiori@unimore.it

Francesco Fumagalli, *Università di Firenze, Italy*
fumagalli@math.unifi.it

Martino Garonzi, *Università di Padova, Italy*

Fares Gherbi, *University Ferhat Abbas of Setif, Algeria*

Anna Luisa Gilotti, *Italy*

Matthias Gruninger, *Université catholique de Louvain, Belgium*
matthias.grueninger@uclouvain.be

Saida Guettouche, *Annaba University, Algeria*

Zoltan Halasi, *University of Debrecen, Hungary*
zhalasi@renyi.mta.hu

Meriem Hamitouche, *University of Béjaïa, Algeria*

Hermann Heineken, *Universität Würzburg, Germany*
heineken@mathematik.uni-wuerzburg.de

Marcel Herzog, *Tel Aviv University, Israel*
herzogm@post.tau.ac.il

Russell Higgs, *University College Dublin, Ireland*
russell.higgs@ucd.ie

Ted Hurley, *National University of Galway, Ireland*
ted.hurley@nuigalway.ie

Roberto Ialenti, *Università di Napoli "Federico II", Italy*

Sergei Ivanov, *Saint-Petersburg State University, Russia*

Vinod Jena, *ICFAI University Raipur, India*
jenavinod@outlook.com

Eric Jespers, *Vrije Universiteit Brussel, Belgium*
efjesper@vub.ac.be

Urban Jezernik, *University of Ljubljana, Slovenia*
urban.jezernik@imfm.si

Arye Juhasz, *Technion - Israel Institute of Technology, Israel*
arju@tx.technion.ac.il

Luise-Charlotte Kappe, *Binghamton University, U.S.A.*
menger@math.binghamton.edu

Thomas Keller, *Texas State University, U.S.A.*
tk04@txstate.edu

Evgenii Khukhro, *Institute of Mathematics, Novosibirsk, Russia*

Stefan Kohl, *Germany*
stefan@mcs.st-and.ac.uk

Mahmut Kuzucuoğlu, *Middle East Technical University, Turkey*
matmah@metu.edu.tr

Andrei Lavrenov, *Saint-Petersburg State University, Russia*

Charles Leedham-Green, *Queen Mary University of London, U.K.*
C. R. Leedham-Green@qmul.ac.uk

Leire Legarreta, *University of the Basque Country, Spain*
leire.legarreta@ehu.es

Antonella Leone, *Università di Napoli "Federico II", Italy*
anleone@unina.it

Mark Lewis, *Kent State University, U.S.A.*
lewis@math.kent.edu

Patrizia Longobardi, *Università di Salerno, Italy*
plongobardi@unisa.it

Alex Lubotzky, *Hebrew University of Jerusalem, Israel*
alexclub@math.huji.ac.il

Andrea Lucchini, *Università di Padova, Italy*
lucchini@math.unipd.it

Daria Lytkina, *Siberian State University, Russia*

Mercede Maj, *Università di Salerno, Italy*
mmaj@unisa.it

Dmitry Malinin, *University of the West Indies, Jamaica*

Gunter Malle, *Technische Universität Kaiserslautern, Germany*
malle@mathematik.uni-kl.de

Andrey Mamontov, *Sobolev Institute of Mathematics, Russia*

Avinoam Mann, *Hebrew University of Jerusalem, Israel*
mann@vms.huji.ac.il

Nil Mansuroglu, *University of Manchester, U.K.*
nil.mansuroglu@postgrad.manchester.ac.uk

Leo Margolis, *University of Stuttgart, Germany*
leo.margolis@mathematik.uni-stuttgart.de

Claude Marion, *University of Fribourg, Switzerland*
claudio.marion@unifr.ch

Maria Martusciello, *Università di Napoli "Federico II", Italy*
maria.martusciello@unina.it

Khalissa Merikhi, *University Ferhat Abbas of Setif, Algeria*

Valerio Monti, *Università dell'Insubria, Italy*
valerio.monti@uninsubria.it

Primož Moravec, *University of Ljubljana, Slovenia*
rimoz.moravec@fmf.uni-lj.si

Marta Morigi, *Università di Bologna, Italy*
mmorigi@dm.unibo.it

Robert Morse, *University of Evansville, U.S.A.*

Carmen Musella, *Università di Napoli "Federico II", Italy*
cmusella@unina.it

Karsten Naert, *Ghent University, Belgium*
Karsten.Naert@ugent.be

Martin L. Newell, *National University of Ireland, Ireland*
martin.newell@nuiigalway.ie

Chiara Nicotera, *Università di Salerno, Italy*
cnicotera@unisa.it

Daniela Nikolova-Popova, *Florida Atlantic University, U.S.A.*
dpopova@fau.edu

Eamonn O'Brien, *University of Auckland, New Zealand*
obrien@math.auckland.ac.nz

Emanuele Pacifici, *Università di Milano, Italy*
emanuele.pacifici@unimi.it

Péter P. Pálffy, *Rényi Institute, Hungary*
ppp@renyi.hu

Christos Pallikaros, *University of Cyprus, Cyprus*
pallikar@ucy.ac.cy

Paolo Papi, *Università di Roma "La Sapienza", Italy*
papi@mat.uniroma1.it

Antonio Pasini, *Università di Siena, Italy*
antonio.pasini@unisi.it

Federico W. Pasini, *Università di Milano-Bicocca, Italy*
f.pasini1@campus.unimib.it

Giuseppe Pirillo, *Università di Firenze, Italy*

Károly Podoski, *University of Debrecen, Hungary*

Gianluca Ponzoni, *Università di Milano-Bicocca, Italy*
g.ponzoni3@campus.unimib.it

Claudio Procesi, *Università di Roma "La Sapienza", Italy*
procesi@mat.uniroma1.it

Claudio Quadrelli, *Università di Milano-Bicocca, Italy*
c.quadrelli1@campus.unimib.it

Pradeep Rai, *Harish-Chandra Research Institute, India*
pradeeprai@hri.res.in

Caterina Rainone, *Università di Napoli "Federico II", Italy*
caterina.rainone@unina.it

Danila Revin, *Sobolev Institute of Mathematics, Russia*
revin@math.nsc.ru

Akbar Rhemtulla, *University of Alberta, Canada*
ar@ualberta.ca

Erik Rijcken, *Ghent University, Belgium*
erijcken@cage.ugent.be

David Riley, *Western University, U.K.*
dmriley@uwo.ca

Silvana Rinauro, *Università della Basilicata, Italy*
silvana.rinauro@unibas.it

John Rizkallah, *University of Cambridge, U.K.*
jr588@cam.ac.uk

Derek J. S. Robinson, *University of Illinois, U.S.A.*
robinson@math.uiuc.edu

Colva Roney-Dougal, *University of St Andrews, U.K.*
colva@mcs.st-and.ac.uk

Gerhard Rosenberger, *University of Hamburg, Germany*
gerhard.rosenberger@math.uni-hamburg.de

Tarek Rouabhi, *University of Setif, Algeria*

Alessio Russo, *Seconda Università di Napoli, Italy*
alessio.russo@unina2.it

Liudmila Sabinina, *UAEM, Cuernavaca, Mexico*

Khadidja Sabri, *University of Oran, Algeria*

Federica Saccomanno, *Università di Napoli "Federico II", Italy*
federica.saccomanno@unina.it

Mohamed Salim, *United Arab Emirates University, U.A.E.*
msalim@uaeu.ae

Nicola Sambonet, *Technion - Israel Institute of Technology, Israel*
sambonet@tx.technion.ac.il

Jeroen Schillewaert, *Imperial College, U.K.*

Carlo Scoppola, *Università dell'Aquila, Italy*
scoppola@univaq.it

Luigi Serena, *Università di Firenze, Italy*
luigi.serena@unifi.it

Hesam Sharifi, *Shahed University, Iran*
hsharifi@shahed.ac.ir

Pavel Shumyatsky, *University of Brasilia, Brazil*
pavel@mat.unb.br

Robert Shwartz, *Ariel University, Israel*
robertsh@ariel.ac.il

Serena Siani, *Università di Salerno, Italy*
ssiani@unisa.it

Salvatore Siciliano, *Università del Salento, Italy*
salvatore.siciliano@unisalento.it

Said Sidki, *University of Brasilia, Brazil*
sidki@mat.unb.br

Sergej Sinchuk, *Saint-Petersburg State University, Russia*
sinchukss@yandex.ru

Andrei Smolensky, *Saint-Petersburg State University, Russia*

Azra Souad, *Bordj Bou-Arredj University, Algeria*

Mima Stanojkovski, *Universiteit Leiden, Holland*

Paola Stefanelli, *Università del Salento, Italy*
paola.stefanelli@unisalento.it

Alexey Stepanov, *Saint-Petersburg State University, Russia*

David Stewart, *University of Cambridge, U.K.*
dis20@cantab.net

Stewart Stonehewer, *University of Warwick, U.K.*
S.E.Stonehewer@warwick.ac.uk

Karl Strambach, *University of Erlangen-Nürnberg, Germany*
stramba@math.fau.de

Gernot Stroth, *Universität Halle-Wittenberg, Germany*
gernot.stroth@mathematik.uni-halle.de

Chiara Tamburini, *Università Cattolica, Brescia, Italy*
mariaclara.tamburini@unicatt.it

Donna Testerman, *École Pol. Féd. de Lausanne, Switzerland*
donna.testerman@epfl.ch

Adam Thomas, *Imperial College, U.K.*
a.thomas10@imperial.ac.uk

Sean Tobin, *National University of Galway, Ireland*
stobin@eircom.net

Antonio Tortora, *Università di Salerno, Italy*
antortora@unisa.it

Maria Tota, *Università di Salerno, Italy*
mtota@unisa.it

Nadir Trabelsi, *University of Setif, Algeria*

Gunnar Traustason, *University of Bath, U.K.*
gt223@bath.ac.uk

Marco Trombetti, *Università di Napoli Federico II, Italy*

Nikolai Vavilov, *St. Petersburg State University, Russia*

Giovanni Vincenzi, *Università di Salerno, Italy*
gvincenzi@unisa.it

Thomas Weigel, *Università di Milano-Bicocca, Italy*
thomas.weigel@unimib.it

Efim Zelmanov, *University of California, U.S.A.*
ezelmanov@ucsd.edu

Jay Zimmerman, *Towson University, U.S.A.*
jzimmerman@towson.edu

Mariya Zvezdina, *Novosibirsk State University, Russia*

Agenda

TUESDAY, APRIL 1st

15.00 Registration

16.00 Opening permanent Poster Session

18.30 Welcome Cocktail

WEDNESDAY, APRIL 2nd

9.15 Welcome Greetings

Chairman: Gernot Stroth

9.30 - 10.10 E. ZELMANOV

Infinite dimensional Lie algebras and beyond

10.20 - 11.00 S. ADYAN

The Burnside Problem on periodic groups for odd exponents $n > 100$

11.05 Coffee break

Chairman: Karl Strambach

11.30 - 12.00 S. SIDKI

On groups with cubic polynomial conditions

12.05 - 12.35 A. LUCCHINI

Bias of group generators in the solvable case

12.40 - 13.20 N. VAVILOV

Decomposition of unipotents, revisited

13.20 Picture

13.30 Lunch break

Chairman: Donna Testerman

15.00 - 15.30 S. STONEHEWER

Generalizing the concept of quasinormality

15.35 - 16.05 P. SHUMYATSKY

Exponent of locally finite groups with small centralizers

16.10 - 16.40 A. ABDOLLAHI

Recent progress on the conjecture of existence of noninner automorphisms of order p for finite nonabelian p -groups

16.45 - 17.00 P. BAGINSKI

Model theoretic advances for groups with bounded chains of centralizers

17.05 Coffee break

Chairman: Hermann Heineken

17.30 - 18.00 G. FERNANDEZ-ALCOBER

On the Hausdorff spectrum of some groups acting on the p -adic tree

18.05 - 18.25 A. STEPANOV

Sandwich classification theorem

18.25 - 18.40 U. DARDANO

The group of inertial automorphisms of an abelian group

18.40 - 18.55 D. NIKOLOVA-POPOVA

On the covering number of small symmetric groups and some sporadic simple groups

21.30 Recital of classical Neapolitan songs

THURSDAY, APRIL 3rd

dedicated to the memory of David Chillag

Chairman: Peter Palfy

9.00 - 9.40 A. LUBOTZKY

Deformation theory and finite simple quotients of triangle groups

9.45 - 10.25 A. MANN

Conjugacy class sizes and commutativity invariants in finite p -groups - old problems and new answers

10.30 - 11.00 C. TAMBURINI

Classical Hurwitz groups of low rank

11.05 Coffee break

Chairman: Velleda Baldoni

11.30 - 12.05 M. HERZOG

Some inverse problems in Baumslag-Solitar groups

12.10 - 12.50 Z. ARAD

A memorial lecture to the late Professor David Chillag (1946-2012)

12.55 - 13.10 N. SAMBONET

The unitary cover of a finite group and the exponent of the Schur multiplier

13.30 Lunch break

Chairman: Eric Jespers

15.00 - 15.35 E. O'BRIEN

Word maps on finite simple groups

15.40 - 16.15 M. LEWIS

Codegrees and nilpotence class of p -groups

16.20 - 17.00 G. TRAUSTASON

On left 3-Engel elements

Coffee break 17.05

Chairman: Andrea Caranti

17.30 - 18.00 R. CAMINA

Conjugacy class sizes of finite groups

18.05 - 18.40 A. JUHASZ

Conjugacy in relatively extra-large Artin group

18.45 - 19.00 M. MORIGI

Cyclic and pro-cyclic coverings of commutators

FRIDAY, APRIL 4th

9.30 Social trip: bus tour of Ischia

13.30 Lunch break

Chairman: Antonio Pasini

15.00 - 15.40 T. WEIGEL

Stallings' decomposition theorem for pro- p groups

15.45 - 16.15 J. ZIMMERMAN

Large odd order groups acting on Riemann surfaces

16.20 - 16.35 M. SALIM

On the unit group of commutative group rings

16.35 - 16.50 M. GARONZI

Factorizing a group with conjugate subgroups

16.50 - 17.05 A. SMOLENSKY

Commutator width of Chevalley groups

17.05 Coffee break

Chairman: Ted Hurley

17.30 - 18.15 G. ROSENBERGER

Gröbner basis computation in group rings and applications for groups

18.20 - 18.35 S. KOHL

A group action on \mathbb{Z}^2 exhibiting fractal-like patterns

18.35 - 18.50 D. MALININ

One construction of integral representations of p -groups

SATURDAY, APRIL 5th

dedicated to the memory of Brian Hartley

Chairman: Martin Newell

9.00 Hartley's memories

9.10 - 9.45 R. BRYANT

The Lie module for the symmetric group

9.50 - 10.25 M. KUZUCUOGLU

Homogenous finitary symmetric groups

10.30 - 11.00 E. KHUKHRO

Finite groups admitting Frobenius groups of automorphisms
with almost fixed-point-free kernel

11.05 Coffee break

Chairman: Akbar Rhemtulla

11.30 - 12.05 C. LEEDHAM-GREEN

Is it possible to classify all groups of prime power order up to isomorphism

12.10 - 12.40 M. EVANS

Some applications of Magnus embedding

12.45 - 13.00 C. ACCIARRI

On words that are concise in residually finite groups

13.00 - 13.15 A. LAVRENOV

Another presentation for symplectic Steinberg groups

13.30 Lunch break

Chairman: Claudio Procesi

15.00 - 15.30 M. DIXON

The theorems of Schur, Baer and Hall

15.35 - 15.55 L.-C. KAPPE

Capable special p -groups of rank 2: structure results

16.05 - 16.25 R. MORSE

Capable special p -groups of rank 2: the isomorphism problem

16.30 - 16.45 C. QUADRELLI

Absolute Galois pro- p groups with constant generating number on open subgroups

16.45 - 17.00 S. SINCHUK

Parabolic factorizations of Steinberg groups

17.10 - 17.40 D. ROBINSON

Group algebras with the bounded splitting property

21.00 Social dinner



CONTENTS

	page
Mark L. Lewis and John K. Mcvey COMPUTING CHARACTER DEGREES VIA A GALOIS CONNECTION	1
Otto. H. Kegel and Mahmut Kuzucuoglu HOMOGENOUS FINITARY SYMMETRIC GROUPS	7
Benjamin Fine, Martin Kreuzer and Gerhard Rosenberger ON MAGNUS' FREIHEITSSATZ AND FREE POLYNOMIAL ALGEBRAS	13
Martyn Dixon, Leonid Kurdachenko and Aleksander Pypka THE THEOREMS OF SCHUR AND BAER: A SURVEY	21
John Cossey and Stewart Edward Stonehewer GENERALIZING QUASINORMALITY	33
Anna Valentina De Luca and Giovanna Di Grazia GROUPS OF INFINITE RANK WITH A NORMALIZER CONDITION ON SUBGROUPS	41

CONTENTS

	page
Francesco De Giovanni and Marco Trombetti A NOTE ON GROUPS WITH MANY LOCALLY SUPERSOLUBLE SUBGROUPS	1
Tullio Ceccherini-Silberstein and Michel Coornaert ON RESIDUALLY FINITE SEMIGROUPS OF CELLULAR AUTOMATA	9
Ulderico Dardano and Silvana Rinauro ON SOLUBLE GROUPS WHOSE SUBNORMAL SUBGROUPS ARE INERT	17
Thomas P. McDonough and Christos A. Pallikaros ON DOUBLE COSETS WITH THE TRIVIAL INTERSECTION PROPERTY AND KAZHDAN-LUSZTIG CELLS IN S_n	25
Eleonora Crestani and Andrea Lucchini BIAS OF GROUP GENERATORS IN FINITE AND PROFINITE GROUPS: KNOWN RESULTS AND OPEN PROBLEMS	49
Martino Garonzi CONJUGATE FACTORIZATIONS OF FINITE GROUPS	69

CONTENTS

	page
Alessio Russo ON CENTRAL ENDOMORPHISMS OF A GROUP	1
Alexey Stepanov SANDWICH CLASSIFICATION THEOREM	7
Marco Pellegrini and Maria Tamburini FINITE SIMPLE GROUPS OF LOW RANK: HURWITZ GENERATION AND (2, 3)-GENERATION	13
Gunnar Traustason THE LOCAL NILPOTENCE THEOREM FOR 4-ENGEL GROUPS REVISITED	21
Arye Juhasz CONJUGACY IN RELATIVELY EXTRA-LARGE ARTIN GROUPS	77