INDEX

ALAVI, S. H., DANESHKHAH, A., TONG-VIET, H. P. and WAKEFIELD,	
T. P.; On Huppert's conjecture for the conway and Fischer families of	
sporadic simple groups	289
ALBIN, P. and ROCHON, F.; Some index formulae on the moduli space of	
stable parabolic vector bundles	1
APPLEBAUM, D.; Aspects of recurrence and transience for Lévy processes in	
transformation groups and noncompact Riemannian symmetric pairs	304
BETSAKOS, D.; Holomorphic functions with image of given logarithmic or	
elliptic capacity	145
BILU, Y. and BORICHEV, A.; Remarks on Eisenstein	158
BORICHEV, A.; See BILU, Y.	158
CHOI, S.; Bounds for a cone-type multiplier operator of negative index in \mathbb{R}^3	321
DANESHKHAH, A.; See ALAVI, S. H.	289
DE FILIPPIS, V. and SCUDO, G.; Hypercommuting values in associative rings	
with unity	181
DEVILLERS, A., PARKINSON, J. and VAN MALDEGHEM, H.; Automor-	
phisms and opposition in twin buildings	189
DOW, K. and WILKEN, D. R.; Extreme points of integral families of analytic	
functions	202
DUBICKAS, A., GARUNKŠTIS, R., STEUDING, J. and STEUDING, R.;	
Zeros of the Estermann zeta function	38
ELSHOLTZ, C. and TAO, T.; Counting the number of solutions to the Erdős-	
Straus equation on unit fractions	50
GARUNKŠTIS, R.; See DUBICKAS, A.	38
GRANDIS, M., JANELIDZE, G. and MÁRKI, L.; Non-pointed exactness,	
radicals, closure operators	348
HONG, S., ZHAO, J. and ZHAO, W.; The universal Kummer congruences	106
HUANG, Z. and ZHANG, X.; Trivial maximal 1-orthogonal subcategories for	
Auslander 1-Gorenstein algebras	133
JANELIDZE, G.; See GRANDIS, M.	348
KHASHYARMANESH, K. and KHOSH-AHANG, F.; Some isomorphisms in	
derived functors and their applications	222
KHOSH-AHANG, F.; See KHASHYARMANESH, K.	222
KIM, S.; Minimal volume of complete uniform visibility manifolds with finite	
volume	375
KIM, S.; Tiling branching multiplicity spaces with GL ₂ pattern blocks	362
LAWSON, M. V., MARGOLIS, S. W. and STEINBERG, B.; The étale	
groupoid of an inverse semigroup as a groupoid of filters	234
LEE, TK. and SHEU, A. JL.; Quasi multiplication and K-groups	257
LENGVÁRSZKY, Z.; Systems of islands with continuous height functions	385

MARGOLIS, S. W.; See LAWSON, M. V.	234
MATOMÄKI, K.; Carmichael numbers in arithmetic progressions	268
MÁRKI, L.; See GRANDIS, M.	348
PARKINSON, J.; See DEVILLERS, A.	189
PETRICH, M.; Characterizing some completely regular semigroups by	
their subsemigroups	397
ROCHON, F.; See ALBIN, P.	1
SCHULTZ, P.; Commuting properties of Ext	276
SCUDO, G.; See DE FILIPPIS, V.	181
SHEU, A. JL.; See LEE, TK.	257
STEINBERG, B.; See LAWSON, M. V.	234
STEUDING, J.; See DUBICKAS, A.	38
STEUDING, R.; See DUBICKAS, A.	38
STOIMENOW, A.; On the definition of graph index	417
TAO, T.; See ELSHOLTZ, C.	50
TONG-VIET, H. P.; See ALAVI, S. H.	289
VAN MALDEGHEM, H.; See DEVILLERS, A.	189
WAKEFIELD, T. P.; See ALAVI, S. H.	289
WILKEN, D. R.; See DOW, K.	202
ZHANG, X.; See HUANG, Z.	133
ZHAO, J.; See HONG, S.	106
ZHAO, W.; See HONG, S.	106

431

JOURNALS

The ANZIAM Journal

Published for The Australian Mathematical Society



The ANZIAM Journal is available online at: http://journals.cambridge.org/anz

To subscribe contact Customer Services

in Cambridge: Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

in New York: Phone +1 (845) 353 7500 Fax +1 (845) 353 4141 Email subscriptions_newyork@cambridge.org

Editors-in-Chief

A. Bassom, The University of Western Australia, Australia G. C. Hocking, Murdoch University, Australia

The ANZIAM Journal considers papers in any field of applied mathematics and related mathematical sciences with the aim of rapid publication in print and electronic formats. Novel applications of mathematics in real situations are especially welcomed. All papers should include some indication of applicability, and an introduction that can be understood by non-specialist readers from the whole applied mathematical community.

Price information is available at: http://journals.cambridge.org/anz

Free email alerts

Keep up-to-date with new material – sign up at http://journals.cambridge.org/anz-alerts

For free online content visit: http://journals.cambridge.org/anz



JOURNAL OF THE AUSTRALIAN MATHEMATICAL SOCIETY

Submission of research papers in pure mathematics and statistics is invited under the condition that the paper has not been published and is not being considered for publication anywhere else. The Journal is seeking articles of more general interest and of moderate length, preferring papers with a good introduction explaining the meaning and value of results. Articles below ten pages or much above thirty pages will usually not be accepted. In view of the pressure on space, only papers highly rated by assessors can be accepted.

For information on submission of papers, and to submit a paper, see the journal's submission system: http://journal.austms.org.au/ojs/. It is also possible to submit the files by emailing a PDF file to jams@austms.org.au.

PREPARATION OF MANUSCRIPTS

1. Papers should be double spaced and have a generous margin. Authors should keep copies of all files.

2. Files must be prepared using LATFX or another variant of TFX, and must not contain definitions of additional commands. A style file can be downloaded by following appropriate links on the Journal website.

3. Each manuscript should include an abstract of no more than 150 words, preferably containing no formulae, a list of keywords, a 2010 Mathematics subject classification, and a short title of no more than 40 characters.

4. For the style of references consult recent issues of the journal. The current usage is either the number referencing [1], [2], [3], or the letter referencing, such as [DS1], [DS2], [DS3] if the authors are N. Dunford and J. T. Schwartz, and the reference is to the 3 volumes of their monograph. In either style, references should be ordered alphabetically by the first author's name. Abbreviations of journal names should follow Mathematical Reviews.

5. Avoid abbreviations such as Thm., Prop., Eq., Ex., iff. In the text do not use the symbols $\forall, \exists, \Longrightarrow$ and \iff . For more information about our stylistic requirements, see the Journal website accessible through www.austms.org.au.

6. Graphics should be prepared to professional standards, preferably using Postscript or LATEX drawing facilities. Charges may apply if the typesetters have to recreate a graphics file because the original is not suitable for printing.

Copying: This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Organizations in the USA who are registered with the CCC may therefore copy material beyond the limits permitted by sections 107 and 108 of US copyright law subject to payment to CCC of the per-copy fee of \$16.00. This consent does not extend to multiple copying for promotional and commercial purposes. Code 1446-7887/2013 \$16.00.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions. For all other use, permission should be sought from Cambridge or the American branch of Cambridge University Press.

Published by Cambridge University Press for the Australian Mathematical Publishing Association Incorporated. Printed in the United Kingdom at Bell & Bain Ltd, Glasgow.

© 2013 Australian Mathematical Publishing Association Inc.



This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of https://doi.org/10.f007/15144078871300044X Published online by Cambridge University Press

Table of Contents

On Huppert's conjecture for the Conway and Fischer families of sporadic simple groups	
Alavi, S. H., Daneshkhah, A., Tong-Viet, H. P. & Wakefield, T. P.	289
Aspects of recurrence and transience for Lévy processes in transformation groups and noncompact Riemannian symmetric pairs <i>Applebaum</i> , D.	304
Bounds for a cone-type multiplier operator of negative index in \mathbb{R}^3 <i>Choi, S.</i>	321
Non-pointed exactness, radicals, closure operators Grandis, M., Janelidze, G. & Márki, L.	348
Tiling branching multiplicity spaces with GL ₂ pattern blocks Kim, S.	362
Minimal volume of complete uniform visibility manifolds with finite volume <i>Kim, S.</i>	375
Systems of islands with continuous height functions Lengvárszky, Z.	385
Characterizing some completely regular semigroups by their subsemigroups <i>Petrich, M.</i>	397
On the definition of graph index Stoimenow, A.	417
Author index	430

Cambridge Journals Online For further information about this journal please go to the journal website at: journals.cambridge.org/jaz



CAMBRIDGE UNIVERSITY PRESS