# AUTHOR INDEX FOR VOLUME 93

ADAMS, M. P.; Mathematical models of calcium and tight junctions in normal	
and reconstructed epidermis	347
ALJOUIEE, A. M.; see ZAÏMI, T.	420
AMRI, M., MKAOUAR, M. and WANNES, W.; Strongly <i>q</i> -additive functions	
and distributional properties of the largest prime factor	177
BACK, J. M.; Stefan problems for melting nanoscaled particles	173
BAHLEKEH, A. and MAHIN FALLAH, A.; Progress on the Auslander–Reiten	433
$\mathbf{BEDTIN} \mathbf{M} \mathbf{I} \cdot \mathbf{GPP} 7 \mathbf{\Lambda} \mathbf{\tilde{I}} \mathbf{M} \mathbf{I} \mathbf{T}$	420
BOLL E and DENNISTON D: The 7 regular and 13 regular partition	420
functions modulo 3	410
BORWEIN, J. M. and GILADI, O.; Nearest points and delta convex functions	
in Banach spaces	283
BORWEIN, J. M. and SINNAMON, C. W.; A closed form for the density	
functions of random walks in odd dimensions	330
BUNDSCHUH, P. and VÄÄNÄNEN, K.; Arithmetic properties of infinite	
products of cyclotomic polynomials	375
BURKE, M.; Synthetic Lie theory	516
BUTTON, J., CHIODO, M. and ZERON-MEDINA LARIS, M.; Transversals	
as generating sets in finitely generated groups	47
CAO, T.; On the Brück conjecture	248
CAO, X. and CHOU, WS.; More constructions of approximately mutually	
unbiased bases	211
CHANG, S. J., CHOI, J. G. and KO, A. Y.; A translation theorem for the	
generalised analytic Feynman integral associated with Gaussian paths	152
CHEN, C. X.; Modelling of atherosclerotic plaque growth using fluid–structure	
interaction	170
CHIODO, M.: see BUTTON, J.	47
CHOI, J. G.; see CHANG, S. J.	152
CHOU, WS.: see CAO, X.	211
CHUNG, J. and RASSIAS, J. M.: On a measure zero stability problem of	
a cyclic equation	272
CUSIMANO. N.: Fractional models in space for diffusive processes in	
heterogeneous media with applications in cell motility and electrical signal	<b>5</b> 10
propagation	518
DING, S.; see HUANG, Z.	238
DOLINKA, I., EAST, J. and MITCHELL, J. D.; Idempotent rank in the	
endomorphism monoid of a nonuniform partition	73
DRAGOMIR, S. S.; Buzano's inequality holds for any projection	504
DUDEK, A. W.; On the number of divisors of $n^2 - 1$	194
EAST, J.; see DOLINKA, I.	73

FERNÁNDEZ BONDER, J., PINASCO, J. P. and SALORT, A. M.; Eigenvalue	
homogenisation problem with indefinite weights	113
FERRAGUTI, A. and MICHELI, G.; On the Mertens-Cesàro theorem for	
number fields	199
GILADI, O.; see BORWEIN, J. M.	283
HAN, Q.; see LÜ, F.	92
HEMANTHKUMAR, B.; see MAHADEVA NAIKA, M. S.	400
HOÀNG, D. P.; Łojasiewicz-type inequalities and global error bounds for	
nonsmooth definable functions in o-minimal structures	99
HUANG, Z., PAN, J. M., DING, S. and LIU, Z.; Automorphism groups of self-	
complementary vertex-transitive graphs	238
HUI, F. K. C.; Mixing it up: new methods for finite mixture modelling of multi-	
species data in ecology	167
HUUSKO, JM.; Localisation of linear differential equations in the unit disc by	
a conformal map	260
JAFARIAN AMIRI, S. M., MADADI, H. and ROSTAMI, H.; On the probability	
of generating nilpotent subgroups in a finite group	447
KAKARIADIS, E. T. A. and PETERS, J. R.; Ergodic extensions of	
endomorphisms	307
KANEKO, M. and SAKATA, M.; On multiple zeta values of extremal height	186
KANG, SJ.; Refined motivic dimension of some Fermat varieties	223
KIM, B.; A remark on tail distributions of partition rank and crank	31
KO, A. Y.; see CHANG, S. J.	152
KOSI-ULBL, I. and VUKMAN, J.; A note on ( <i>m</i> , <i>n</i> )-Jordan derivations of rings	
and Banach algebras	231
KOVALEV, L. V.; Lipschitz retraction of finite subsets of Hilbert spaces	146
KREMPA, J. and STOCKA, A.; Addendum to 'On sets of pp-generators of finite	
groups'	350
LI, JZ.; Mazur–Ulam property of the sum of two strictly convex Banach spaces	473
LIN, Z.; Unimodality and coloured hook factorisation	1
LING, B. and LOU, B. G.; A 2-arc transitive pentavalent Cayley graph of $A_{39}$	441
LIU, C.; see ZHOU, Y.	486
LIU, X.; Selected topics in spectral graph theory	511
LIU, Z.; see HUANG, Z.	238
LLORENS-FUSTER, E.; Orbitally nonexpansive mappings	497
LOU, B. G.; see LING, B.	441
LÜ, F., HAN, Q. and LÜ, W.; On unicity of meromorphic solutions to difference	
equations of Malmquist type	92
LÜ, W.; see LÜ, F.	92
LUO, Y. F.; see ZHANG, W. T.	454
MADADI, H.; see JAFARIAN AMIRI, S. M.	447

MAHADEVA NAIKA, M. S., HEMANTHKUMAR, B. and	
SUMANTH BHARADWAJ, H. S.; Congruences modulo 2 for certain	
partition functions	400
MAHIN FALLAH, A.; see BAHLEKEH, A.	433
MARQUES, D., RAMIREZ, J. and SILVA, E.; A note on lacunary power series	
with rational coefficients	372
MEEMARK, Y.; see SUNTORNPOCH, B.	353
MICHELI, G.; see FERRAGUTI, A.	199
MITCHELL, J. D.; see DOLINKA, I.	73
MKAOUAR, M.; see AMRI, M.	177
MOORES, M. T.; Bayesian computational methods for spatial analysis of	
images	345
NAGOSHI, H.; Hypertranscendence of <i>L</i> -functions for $GL_m(\mathbb{A}_Q)$	388
OHNO, T. and SHIMOMURA, T.; Sobolev inequalities for Riesz potentials of	
functions in $L^{p(\cdot)}$ over nondoubling measure spaces	128
PAN, J. M.; see HUANG, Z.	238
PEATE, J.; Riesz transform estimates in the absence of a preservation condition	
and applications to the Dirichlet Laplacian	521
PELLEGRINI, M. A.; The (2,3)-generation of the classical simple groups of	
dimensions 6 and 7	61
PENNISTON, D.; see BOLL, E.	410
PETERS, J. R.; see KAKARIADIS, E. T. A.	307
PINASCO, J. P.; see FERNÁNDEZ BONDER, J.	113
RAMIREZ, J.; see MARQUES, D.	372
RASSIAS, J. M.; see CHUNG, J.	272
REZA SALARIAN, M.; Finite symmetric graphs with 2-arc-transitive	
quotients: affine case	13
ROSTAMI, H.; see JAFARIAN AMIRI, S. M.	447
SAKATA, M.; see KANEKO, M.	186
SALORT, A. M.; see FERNANDEZ BONDER, J.	113
SANINA, E.; Statistics of wave kinematics in random directional wave fields	169
SHIMOMURA, T.; see OHNO, T.	128
SHPARLINSKI, I. E.; Systems of congruences with products of variables from	
short intervals	364
SHRAVAN KUMAR, N. and SIVANANTHAN, S.; Characterisation of the	
Fourier transform on compact groups	467
SILVA, E.; see MARQUES, D.	372
SINNAMON, C. W.; see BORWEIN, J. M.	330
SIVANANTHAN, S.; see SHRAVAN KUMAR, N.	467
SONO, K.; A note on simple zeros of primitive Dirichlet <i>L</i> -functions	19
STOCKA, A.; see KREMPA, J.	350
SUMANTH BHARADWAJ, H. S.; see MAHADEVA NAIKA, M. S.	400

SUNTORNPOCH, B. and MEEMARK, Y.; Cayley graphs over a finite chain	
ring and gcd-graphs	353
SUTHERLAND, N.; Algorithms for Galois extensions of global function fields	513
TĂRNĂUCEANU, M.; The subgroup commutativity degree of finite <i>P</i> -groups	37
TEHSEEN, N.; Geometric symmetry techniques for partial differential	
equations	342
THAO, N. H.; Regularity properties in variational analysis and applications in	
optimisation	523
VÄÄNÄNEN, K.; see BUNDSCHUH, P.	375
VAN DEN DUNGEN, K.; Lorentzian geometry and physics in Kasparov's	
theory	340
VUKMAN, J.; see KOSI-ULBL, I.	231
WANG, Y.; Filtered polynomial approximation on the sphere	162
WANNES, W.; see AMRI, M.	177
XUE, Z. Q.; Fixed points theorems for generalised weakly contractive mappings	321
YANG, Y. L. and ZHANG, D. Y.; Two optimisation problems for convex bodies	137
YOU, C.; Group action preserving the Haagerup property of $C^*$ -algebras	295
YOU, C.; Model selection and estimating degrees of freedom in Bayesian linear	
and linear mixed effect models	164
ZAÏMI, T., BERTIN, M. J. and ALJOUIEE, A. M.; On number fields without a	
unit primitive element	420
ZARRIN, M.; On noncommuting sets and centralisers in infinite groups	42
ZERON-MEDINA LARIS, M.; see BUTTON, J.	47
ZHANG, D. Y.; see YANG, Y. L.	137
ZHANG, W. T. and LUO, Y. F.; A sufficient condition under which a semigroup	
is nonfinitely based	454
ZHANG, Z.; see ZHOU, Y.	486
ZHOU, Y., ZHANG, Z. and LIU, C.; On isometric representation subsets of	
Banach spaces	486
ZIVARI-KAZEMPOUR, A.; A characterisation of 3-Jordan homomorphisms	
on Banach algebras	301

### INFORMATION FOR AUTHORS

The *Bulletin of the Australian Mathematical Society* aims at quick publication of original research in all branches of mathematics. To ensure speedy publication, only articles which are sufficiently well presented, able to be published without revision, and which are judged by the Editor (often in consultation with an Associate Editor) to be competitive are refereed. This policy is in the interests of authors, as a quick rejection is better than a slow rejection. The *Bulletin* receives more than five times the material that can be published, therefore there are many commendable papers not accepted. Editorial decisions on acceptance or otherwise are taken quickly, normally within a month of receipt of the paper. Papers are accepted only after peer review.

Manuscripts are accepted for review with the understanding that the same work is not concurrently submitted elsewhere. For a paper to be acceptable for publication, not only should it contain new and interesting results, but also

- (i) the exposition should be clear and attractive, and
- (ii) the manuscript should be in publishable form, without revision.

Further information regarding these requirements may be found through our website www.austms.org.au/Bulletin. Authors are asked to avoid, as far as possible, the use of mathematical symbols in the title.

Articles should be prepared in  $L^{T}EX$  using  $\mathcal{R}_{M}S$ -L $^{T}EX$  packages and submitted as a PDF file via our journal management system, at www.austms.org.au/Publications/Submissions/BAustMS. This permits authors to track their papers through the editorial process. Recent versions of  $T_{E}X$  are able to produce PDF files directly. A  $L^{T}EX$  class file for the *Bulletin* can be downloaded from the website. Authors who need assistance may email the secretary of the *Bulletin* at editor@bulletin.austms.org.au.

Authors are advised to keep copies of all files of the submitted article; the *Bulletin* will not accept responsibility for any loss.

## EDITORIAL POLICY

**1. References.** Arrange references alphabetically (by surname of the first author) and cite them numerically in the text. Ensure the accuracy of the references: authors' names should appear as in the work quoted. Include in the list of references only those works cited, and avoid citing works which are in preparation or submitted. Where the work cited is not readily accessible (for example, a preprint) a copy of the article should be included with your submission.

### 2. Abstracts.

- 1. Each paper must include an abstract of not more than 150 words, which should contain a brief but informative summary of the contents of the paper, but no inessential details.
- 2. The abstract should be self-contained, but may refer to the title.
- 3. Specific references (by number) to a section, proposition, equation or bibliographical item should be avoided.

**3. Subject Classification and Key Words.** Authors should include a few key words and phrases and one or more classification numbers, following the American Mathematical Society 2010 Mathematics Subject Classification for all codes. Details of this scheme can be found on the web at www.ams.org/msc.

**4. Abstracts of PhD Theses.** The *Bulletin* endeavours to publish abstracts of all accepted Australasian PhD theses in mathematics. One restriction, however, is that the abstract must be received by the Editor within six months of the degree being approved.



This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organisation established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

## Table of Contents

Cavley graphs over a finite chain ring and god-graphs	
Suntornboch, B. & Meemark, Y.	353
Systems of congruences with products of variables from short intervals	
Shparlinski, I. E.	364
A note on lacunary power series with rational coefficients	
Marques, D., Ramirez, J. & Silva, E.	372
Arithmetic properties of infinite products of cyclotomic polynomials	
Bundschuh, P. & Väänänen, K.	375
Hypertranscendence of L-functions for $\operatorname{GL}_m(\mathbb{A}_{\mathbb{Q}})$	
Nagoshi, H.	388
Congruences modulo 2 for certain partition functions	
Mahadeva Naika, M. S., Hemanthkumar, B. & Sumanth Bharadwaj, H. S.	400
The 7-regular and 13-regular partition functions modulo 3	
Boll, E. & Penniston, D.	410
On number fields without a unit primitive element	
Zaümi, T., Bertin, M. J. & Aljouiee, A. M.	420
Progress on the Auslander-Reiten conjecture	
Bahlekeh, A. & Mahin Fallah, A.	433
A 2-arc transitive pentavalent Cayley graph of A <sub>39</sub>	
Ling, B. & Lou, B. G.	441
On the probability of generating nilpotent subgroups in a finite group	447
Jajartan Amiri, S. M., Maaaat, H. & Rostami, H.	447
A sufficient condition under which a semigroup is nonlinitely based $7home W T R^2 Lue Y F$	454
Characterisation of the Fourier transform on compact groups	131
Shravan Kumar N 68 Sinananthan S	467
Mazur-Illam property of the sum of two strictly convex Banach spaces	107
Li. 7-7.	473
On isometric representation subsets of Banach spaces	
Zhou, Y., Zhang, Z. & Liu, C.	486
Orbitally nonexpansive mappings	
Llorens-Fuster, E.	497
Buzano's inequality holds for any projection	
Dragomir, S. S.	504
Abstracts of PhD Theses	
Selected topics in spectral graph theory	
Liu, X.	511
Algorithms for Galois extensions of global function fields	
Sutherland, N.	513
Synthetic Lie theory	
Burke, M.	516
Fractional models in space for diffusive processes in heterogeneous media with applications in cell motility	
	518
Riesz transform estimates in the absence of a preservation condition and applications to the Dirichlet	510
Laplacian	
Peate, J.	521
Regularity prope <mark>rties in variational</mark> analysis and applications in optimisation	
Thao, N. H.	523
Author Index for Volume 93	525
Autor Andra IVI TUILIIL JU	525

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



CAMBRIDGE UNIVERSITY PRESS