INDEX

AJBAR, A.; see ASIF, M. 162
ALI, E.; see ASIF, M. 162
ARAGÓN ARTACHO, F. J., BORWEIN, J. M. and TAM, M. K.; Douglas–Rachford feasibility methods for matrix completion problems 299
ASIF, M., ALI, E. and AJBAR, A.; On the existence of chaotic behaviour in pure and simple microbial competition: The role of Contois kinetics 162
BORWEIN, J. M; see ARAGÓN ARTACHO, F. J. 299
BRIDESON, M. A.; see FORBES, L. K. 232
CHEN, X.; see HSIAO, H.-Y. 289
DHILLON, H. and MANDAL, B. N.; Three-dimensional wave-free potentials in the theory of water waves 175
EGGAR, M. H.; On the organization of round robin tournaments with constraints 357
FORBES, L. K.; A note on travelling waves in competitive reaction systems 1
FORBES, L. K. and BRIDESON, M. A.; Exact solutions for interfacial outflows with straining 232
FRAUENDIENER, J. and PETER, R.; Blow-up of the nonequivariant $(2 + 1)$-dimensional wave map 151
GONG, Y.; see HSIAO, H.-Y. 289
GOSWAMI, D., PANI, A. K. and YADAV, S.; Optimal L^2 estimates for the semidiscrete Galerkin method applied to parabolic integro-differential equations with nonsmooth data 245
GUNAWAN, A. Y.; see KASBAWATI 336
HERTADI, R.; see KASBAWATI 336
HOCKING, G. C. and ZHANG, H.; A note on axisymmetric supercritical coning in a porous medium 327
HSIAO, H.-Y., HSIEH, C.-Y., CHEN, X., GONG, Y., LUO, X. and LIAO, G.; New development of nonrigid registration 289
HSIEH, C.-Y.; see HSIAO, H.-Y. 289
HYWOOD, J. D. and LANDMAN, K. A.; Biased random walks, partial differential equations and update schemes 93
JIN, Z. and YIN, G.; An optimal dividend policy with delayed capital injections 129
KALIGATLA, R. B.; see MANAM, S. R. 267
KARAOGLU, E. and MERDAN, H.; Hopf bifurcation analysis for a ratio-dependent predator–prey system involving two delays 214
KASBAWATI, GUNAWAN, A. Y., HERTADI, R. and SIDARTO, K. A.; Effects of time delay on the dynamics of a kinetic model of a microbial fermentation process 336
KHADER, M. M.; A new formula for Adomian polynomials and the analysis of its truncated series solution for fractional non-differentiable initial value problems 69

https://doi.org/10.1017/S144618111400025X Published online by Cambridge University Press

KILIANOVÁ, S. and ŠEVČOVIČ, D.; A transformation method for solving the Hamilton–Jacobi–Bellman equation for a constrained dynamic stochastic optimal allocation problem 14
LANDMAN, K. A.; see HYWOOD, J. D. 93
LIAO, G.; see HSIAO, H.-Y. 289
LUO, X.; see HSIAO, H.-Y. 289
MANAM, S. R. and KALIGATLA, R. B.; Membrane-coupled gravity wave scattering by a vertical barrier with a gap 267
MANDAL, B. N.; see DHILLON, H. 175
MERDAN, H.; see KARAOGLU, E. 214
MOLANO MOLANO, L. A.; On Laguerre–Sobolev type orthogonal polynomials: zeros and electrostatic interpretation 39
PANI, A. K.; see GOSWAMI, D. 245
PETER, R.; see FRAUENDIENER, J. 151
PRICE, C. J.; see ROBERTSON, B. L. 109
REALE, M.; see ROBERTSON, B. L. 109
ROBERTSON, B. L., PRICE, C. J. and REALE, M.; A CARTopt method for bound-constrained global optimization 109
SAAD, E. I.; Motion of a slip sphere in a nonconcentric fictitious spherical envelope of micropolar fluid 383
ŠEVČOVIČ, D.; see KILIANOVÁ, S. 14
SIDARTO, K. A.; see KASBAWATI 336
SLADE, P. F.; Some inequalities for theoretical spatial ecology 55
SMITH, B. G.; see WILLMOTT, G. R. 197
TAM, M. K.; see ARAGÓN ARTACHO, F. J. 299
WILLMOTT, G. R. and SMITH, B. G.; Modelling of resistive pulse sensing: flexible methods for submicron particles 197
YADAV, S.; see GOSWAMI, D. 245
YIN, G.; see JIN, Z. 129
ZHANG, H.; see HOCKING, G. C. 327
ZHANG, L.-W.; A closed-form pricing formula for variance swaps with mean-reverting Gaussian volatility 362

https://doi.org/10.1017/S144618111400025X Published online by Cambridge University Press

PREPARATION OF MANUSCRIPTS

The ANZIAM Journal is typeset in LaTeX. Style files are available from `http://www.austms.org.au/Publ/ANZIAM/authorinfo.shtml`.

The manuscript should conform to the following rules. In case of any doubt, authors are advised to refer to previous papers in the Journal.

1. Abstract, title and author details. An abstract not exceeding 300 words should be included in the manuscript. If the title is long, supply also a shortened form of the title not exceeding 40 characters, including spaces. Addresses should be shown under the authors name, including e-mail address if available.

2. Main headings. Main headings should be numbered, centred and shown thus:

2. Preliminary results

3. Theorems. The titles LEMMA, THEOREM, COROLLARY, REMARK, DEFINITION *etc.* should be left-justified and numbered consecutively with arabic numerals, *e.g.*
LEMMA 1.1. The content of the lemma, theorem *etc.* should follow, as here.

4. Acknowledgements. If acknowledgements of support and assistance are made, these should be given at the end of the article. Footnotes should be avoided.

5. Equations. Equations should be punctuated to conform to their place in the syntax of the sentence. Equation numbers should be shown on the right in round brackets.

6. References. The reference list should be in ALPHABETICAL ORDER by name of first author, preceded by a reference number in square brackets. These references should be cited in the text by giving the appropriate number in square brackets. The following layout for books, journal articles, theses, articles in books, and conference proceedings respectively, must be followed.

[1] M. Abramowitz and I. A. Stegun (eds), *Handbook of mathematical functions* (Dover, New York, 1970).

[2] S. N. Biswas and T. S. Santhanam, "Coherent states of para-Bose oscillators", *J. Austral. Math. Soc. Ser. B* **22** (1980) 210–217.

[3] F. H. Busse, "On the mean field problem of thermal convection", *Max-Plank Inst. Phys. Astrophys. Rep. MPI-PAE/Astro* **31** (1970) 1–31.

[4] E. M. Casling, "Slender planing surfaces", Ph. D. Thesis, University of Adelaide, 1978.

[5] R. H. Day, "Adaptive process and economic theory", in *Adaptive economic models* (eds R. H. Day and T. Groves), (Academic Press, New York, 1975) 1–38.

[6] J. W. Miles, "Resonant response of harbors (the harbor paradox revisited)", *Proc. 8th Symp. Naval Hydro.* (1970) 95–115.

7. Tables. Each should be preceded by a caption beginning: TABLE 1 (or 2, 3, *etc.*)

8. Figures. Each figure should have a caption beginning: FIGURE 1 (or 2, 3, *etc.*).

Authors should provide diagrams drawn to professional standards in the form of encapsulated Postscript files. Other forms of diagrams drawn to professional standard may be acceptable, however this may also necessitate a payment from the author(s) to cover additional cost involved in processing them.

https://doi.org/10.1017/S144618111400025X Published online by Cambridge University Press

SUBMISSION OF MANUSCRIPTS

Prior to submission authors are asked to read the section "Preparation of Manuscripts" on the previous page.

Authors of articles submitted for publication in The ANZIAM Journal are asked to ensure that their manuscripts are in a form suitable for sending to the printer. Editors reserve the right to return poorly presented material to authors for revision.

The author should submit a pdf file if possible to the Online Journal System. Follow the instructions at `http://anziamj.austms.org.au/ojs/index.php/ANZIAMJ/user/register`.

It will speed up processing of accepted papers if a LaTeX version of the manuscript is available. It is not necessary to send such a file with the submitted paper. This will be requested if the paper is accepted.

Authors of accepted papers will be provided with a complimentary electronic version of their paper as published.

Excessive costs incurred by the Australian Mathematical Society through corrections to or withdrawal of articles may be charged to the authors concerned.

Submission of a paper to The ANZIAM Journal is a representation by the author that the manuscript has not been copyrighted or published, and that it is not being considered for publication elsewhere.

THE ANZIAM JOURNAL AND THE ELECTRONIC SUPPLEMENT

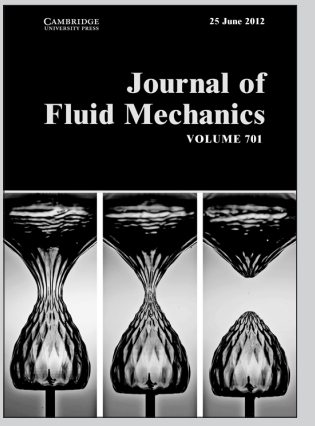
The Journal of the Australian Mathematical Society began publication in 1959, and from 1975 appeared in two series, Series A (Pure Mathematics and Statistics) and Series B (Applied Mathematics). Series B is now The ANZIAM Journal and is published in volumes comprising four quarterly parts. There is also a fifth (electronic) part designed for rapid publication (`http://anziamj.austms.org.au/ojs/index.php/ANZIAMJ`). The Editor-in-Chief is A. J. Roberts, School of Mathematical Sciences, The University of Adelaide, ADELAIDE, SA 5005; `anthony.roberts@adelaide.edu.au`. All five parts are refereed. All accepted papers have the option of publication in the electronic part.

It is the editorial policy of The ANZIAM Journal to consider papers in any field of applied mathematics and related mathematical sciences. Novel applications of mathematics in real situations are especially welcome. All papers must include some indication of applicability, and an introduction that can be understood by non-specialist readers from the whole applied mathematical community.

https://doi.org/10.1017/S144618111400025X Published online by Cambridge University Press

CAMBRIDGE JOURNALS

Journal of Fluid Mechanics



Editor
M. G. Worster, University of Cambridge, UK

Journal of Fluid Mechanics is the leading international journal in the field and is essential reading for all those concerned with developments in fluid mechanics. It publishes authoritative articles covering theoretical, computational and experimental investigations of all aspects of the mechanics of fluids. Each issue contains papers on both the fundamental aspects of fluid mechanics, and their applications to other fields such as aeronautics, astrophysics, physiology, chemical and mechanical engineering, hydraulics, meteorology, oceanography, geology, acoustics and combustion.

Journal of Fluid Mechanics
is available online at:
http://journals.cambridge.org/flm

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

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

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

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

CAMBRIDGE UNIVERSITY PRESS

https://doi.org/10.1017/S144618111400025X Published online by Cambridge University Press

THE AUSTRALIAN MATHEMATICAL SOCIETY

President:	P. J. FORRESTER	Department of Mathematics and Statistics The University of Melbourne Parkville VIC 3010, Australia
Secretary:	P. J. STACEY	Department of Mathematics and Statistics La Trobe University Bundoora Victoria 3086, Australia
Treasurer:	A. HOWE	Department of Mathematics Mathematical Sciences Institute The Australian National University Canberra ACT 0200, Australia

Membership and correspondence: Applications for membership, notices of changes of address or title or position, members' subscriptions and correspondence related to accounts should be sent to the Treasurer. All other correspondence should be sent to the Secretary.

Subscriptions: Four parts are planned for 2014. Subscription prices for 2014 are £298 ($553 in USA, Canada and Mexico) which includes print and electronic access. The electronic-only access price for 2014 is £243 ($446 in USA, Canada and Mexico). Single parts cost £82 ($152 in USA, Canada and Mexico). Prices include delivery by air where appropriate. EU subscribers who are not registered for VAT should add VAT at their country's rate. VAT registered subscribers should provide their VAT registration number. Orders, which must be accompanied by payment, should be sent to a subscription agent, book-seller, or direct to the publishers: Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU or, in the USA, Canada and Mexico, Cambridge University Press, Journals Fulfilment Department, 100 Brook Hill Drive, West Nyack, NY 10994-2133. Japanese prices are available from Kinokuniya Company Ltd, PO Box 55, Chitose Tokyo 156, Japan. Periodicals postage is paid at New York, NY and additional mailing offices. POSTMASTER: send address changes in USA, Canada and Mexico to *The ANZIAM JOURNAL*, Cambridge University Press, Journals Fulfilment Department, 100 Brook Hill Drive, West Nyack, NY 10994-2133.

This journal is included in the Cambridge Journals Online service. Further information, and online access for subscribers, is available at http://journals.cambridge.org/anz.

Copying: This journal is registered with the Copyright Clearance Centre, 222 Rosewood Drive, Danvers, MA 01923, USA. Organizations in the USA who are registered with the CCC may therefore copy materials 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 1446-1811/2014 $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.

© 2014 Australian Mathematical Publishing Association Inc.

MIX
Paper from responsible sources
FSC® C007785

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 the world's forests. Please see www.fsc.org for information.

https://doi.org/10.1017/S144618111400025X Published online by Cambridge University Press

Table of Contents

Douglas–Rachford feasibility methods for matrix completion problems
Aragón Artacho, F. J., Borwein, J. M. & Tam, M. K. **299**

A note on axisymmetric supercritical coning in a porous medium
Hocking, G. C. & Zhang, H. **327**

Effects of time delay on the dynamics of a kinetic model of a microbial fermentation process
Kasbawati, Gunawan, A. Y., Hertadi, R. & Sidarto, K. A. **336**

On the organization of round robin tournaments with constraints
Eggar, M. H. **357**

A closed-form pricing formula for variance swaps with mean-reverting Gaussian volatility
Zhang, L.-W. **362**

Motion of a slip sphere in a nonconcentric fictitious spherical envelope of micropolar fluid
Saad, E. I. **383**

Author Index **402**

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

Aust MS
Australian Mathematical Society Inc.

CAMBRIDGE
UNIVERSITY PRESS

https://doi.org/10.1017/S144618111400025X Published online by Cambridge University Press