

BULLETIN

ISSN 0004-9727

of the

AUSTRALIAN MATHEMATICAL SOCIETY

Volume 27 Number 1

February 1983

On the boundary values of the solutions of linear elliptic equations by J. Chabrowski and H. B. Thompson	1
Non-uniform dichotomy of evolutionary processes in Banach spaces by Petre Preda and Mihail Megan	31
Toward a classification of dynamical symmetries in classical mechanics by Geoff Prince	53
On approximation of continuously differentiable functions by positive linear operators by Heinz H. Gonska	73
Functional equations occurring in the theory of delayed differential equations by Józef Banás and Stanisław Wedrychowicz	83
Real Hardy spaces of an annulus by Hwai-chiuan Wang	91
Function spaces on the unit circle by Richard J. Loy	107
Banach algebras with one dimensional radical by Lawrence Stedman	115
Hilbert spaces have the Banach-Stone property for Bochner spaces by Peter Greim	121
Krull dimension and torsion radicals by A. K. Boyle and R. J. Serven	129
On an optimal control problem involving second order hyperbolic systems with boundary controls by K. G. Choo, K. L. Teo and Z. S. Wu	139
ABSTRACTS OF AUSTRALASIAN PhD THESES	
The coupled diffusion of heat and moisture in bulk wool by J. M. Heath	149
Series solutions for the profiles of axisymmetric fluid-liquid interfaces by Wilfred James Pinchin	151
Generalised quasiperfect numbers by Graeme L. Cohen	153
Continental shelf dynamics by Ian Leslie Collings	157
Quadratic approximation and its application to acceleration of convergence by S. L. Loi	159

The University of Queensland Press, St Lucia, Queensland, 4067, Australia

Printed in Australia by Watson Ferguson & Co.

Registered by Australia Post - Publication No. QBQ2945

BULLETIN OF THE AUSTRALIAN MATHEMATICAL SOCIETY

Editor: Sidney A. Morris

Deputy Editor: K. R. Pearson

Honorary Editor: B. H. Neumann

Associate Editors

Robert S. Anderssen
Alan L. Andrew
B. D. Craven
Brian A. Davey
P. Donovan
J. A. Eccleston
B. J. Gardner
J. R. J. Groves

James M. Hill
D. A. Holton
D. C. Hunt
P. E. Kloeden
Rodney Nilsen
Sheila Oates-Williams
A. J. van der Poorten
J. H. Rubinstein

Leon Simon
Ross Street
G. Szekeres
D. G. Tacon
Colin J. Thompson
H. B. Thompson
Rudolf Vyborny

Assistant Editors

Robert S. Anderssen

M. S. Brooks

INFORMATION FOR AUTHORS

The BULLETIN of the Australian Mathematical Society aims at quick publication of original research in all branches of mathematics. Timely expository articles are also welcomed.

To ensure speedy publication, editorial decisions on acceptance or otherwise are taken quickly, normally within a month of receipt of the paper. Papers are accepted only after being evaluated by the Editor and an Associate Editor or another expert. Of course responsibility for the correctness of results published in the BULLETIN remains with the authors.

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.

Nevertheless some meritorious papers will have to be rejected because speed of publication involves space limitations.

Authors should submit THREE clean, high quality copies to

The Editor, Bulletin of the Australian Mathematical Society,
Department of Pure Mathematics, La Trobe University,
Bundoora, Victoria 3083, Australia

but should not send the original typescript of their papers, as material submitted to the BULLETIN will usually not be returned. Authors should note that each paper submitted must include an abstract and one or more classification numbers following the 1980 Mathematics Subject Classification.

As even minor revisions are generally not permitted, authors should read carefully all the details listed on the inside back cover.

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 3 months of the degree being approved.

© Copyright by Australian Mathematical Society 1982.

Copyright. Apart from any fair dealing for scholarly purposes as permitted under the Copyright Act, no part of this BULLETIN may be reproduced by any process without written permission from the Treasurer of the Australian Mathematical Society.