

GLASGOW MATHEMATICAL JOURNAL

VOLUME 31

GLASGOW MATHEMATICAL JOURNAL

EDITED BY

I. ANDERSON	S. D. COHEN	N. K. DICKSON
H. R. DOWSON	W. D. MUNN	R. W. OGDEN
P. F. SMITH	R. J. STEINER	W. W. STOTHERS
M. J. TOMKINSON	J. R. L. WEBB	D. B. WEBBER

VOLUME 31
1989

PUBLISHED BY
SCOTTISH ACADEMIC PRESS LIMITED
33 MONTGOMERY STREET
EDINBURGH EH7 5JX

ISSN 0017 0895

Printed in Northern Ireland at The
Universities Press (Belfast) Ltd.

© *Glasgow Mathematical Journal Trust* 1989

CONTENTS

Anderson, David F. , Root closure in integral domains II	127
Armitage, D. H. , A uniqueness theorem for harmonic functions on half-spaces	189
Biagioli, Anthony J. F. , A proof of some identities of Ramanujan using modular forms	271
Blyth, T. S., Noor, A. S. and Varlet, J. C. , Equational bases for subvarieties of double MS-algebras	1
Brandl, Rolf , Groups whose lattices of normal subgroups are distributive	183
Brown, Ezra , $x^4 + dx^2y^2 + y^2 = z^2$: Some cases with only trivial solutions — and a solution Euler missed	297
Casolo, Carlo , Soluble groups with finite Wielandt length	329
Dan, Phan , <i>See</i> van Huynh, Dinh and Dan, Phan	251
Duggal, B. P. , A remark on the essential spectra of quasi-similar dominant contractions	165
Edjvet, M. , A Magnus theorem for free products of locally indicable groups	383
Emmanuele, G. , Another proof of a result of N. J. Kalton, E. Saab and P. Saab on the Dieudonné property in $C(K, E)$	137
Feng, Wenying and Ji, Guoxing , A counterexample in the theory of derivations	161
Gilbert, N. D. and Higgins, P. J. , The non-abelian tensor product of groups and related constructions	17
Gromadzki, Grzegorz and Maclachlan, Colin , Supersoluble groups of automorphisms of compact Riemann surfaces	321
Hannebauer, Torsten , Relation modules of amalgamated free products and HNN extensions	263
Hanssens, G. and Van Maldeghem, H. , On projective Hjelmslev planes of level n	257
Heineken, Hermann , On E -groups in the sense of Peng	231
Higgins, P. J. , <i>See</i> Gilbert, M. D. and Higgins, P. J.	17
Holub, James R. , Dunford-Pettis and strongly Dunford-Pettis operators on $L^1(\mu)$	49
Humphries, Stephen P. , Free products of mapping class groups generated by Dehn twists	213
Jamison, J. E. and Lin, Pei-Kee , A result on hermitian operators	71
Jarchow, Hans , Factoring absolutely summing operators through Hilbert–Schmidt operators	131
Ji, Guoxing , <i>See</i> Feng, Wenying and Ji, Guoxing	161
Jones, M. C. W. , Small amplitude capillary-gravity waves in a channel of finite depth	141

Jordan, D. A. , Unique factorisation of normal elements in non-commutative rings	103
Kucharz, W. , Symplectic bilinear forms on affine real algebraic surfaces	195
Künzi, Hans-Peter A. , Some remarks on quasi-uniform spaces	309
Levi, Inessa and Schein, Boris M. , The semigroup of one-to-one transformations with finite defects	243
Lin, Pei-Kee , <i>See</i> Jamison, J. E. and Lin, Pei-Kee	161
Maclachlan, Colin , <i>See</i> Gromadzki, Grzegorz and Maclachlan, Colin	321
Nawrocki, Marek , On weak approximation and convexification in weighted spaces of vector-valued continuous functions	59
Noor, A. S. , <i>See</i> Blyth, T. S., Noor, A. S. and Varlet, J. C.	1
Ó Searcóid, Michéal , A contribution to the solution of the compact correction problem for operators on a Banach space	219
Petrich, Mario , Monogenic endomorphisms of a free monoid	87
Petrich, Mario and Rankin, Stuart A. , Harmonic inverse semigroups	335
Rankin, Stuart A. , <i>See</i> Petrich, Mario and Rankin, Stuart A.	335
Rhodes, C. P. L. , On valuation subalgebras and their centres	115
Salvi, L. , Error estimates for the spectral Galerkin approximations of the solutions of Navier–Stokes type equations	199
Schein, Boris M. , <i>See</i> Levi, Inessa and Schein, Boris M.	243
Smith, Howard , On torsion-free hypercentral groups with all subgroups subnormal	193
Smith, Howard , Elliptically embedded subgroups and nilpotent products	371
Solel, Baruch , Coordinates for analytic operator algebras	31
Steiner, Richard , Multiple semidirect products of associative systems	353
Stothers, W. W. , On formulae of Macbeath and Hussein	65
van Huynh, Dinh and Dan, Phan , Rings characterized by cyclic modules	251
Van Maldeghem, H. , <i>See</i> Hanssens, G. and Van Maldeghem, H.	257
Varlet, J. C. , <i>See</i> Blyth, T. S., Noor, A. S. and Varlet, J. C.	1
Vasilescu, F.-H. , Homogeneous operators and essential complexes	73
Wilkinson, J. C. , Quotient rings, chain conditions and injective ring endomorphisms	173
Wnuk, Witold , A note on the positive Schur property	169

GLASGOW MATHEMATICAL JOURNAL

Information for Contributors

The *Glasgow Mathematical Journal* invites submission of papers in any branch of Pure or Applied Mathematics. Contributions from all parts of the world are welcomed and given careful consideration.

Manuscripts, preferably typed, should be prepared so as to conform with the practice in current issues of the Journal, especially with regard to references, tables and figures.

References should be placed at the end of the paper, arranged and numbered in alphabetical order. In the text, reference numbers should be enclosed in square brackets and underlined, to distinguish them from formula numbers, which should be quoted in round brackets. The following particulars should be given, in the order indicated:

for references to books—*author, title, edition, publisher, year of publication, page reference*;

for references to articles in periodicals—*author, title of article, short title of periodical, series no. (if any), volume no., year, pagination*.

Text figures must be suitable for photographic reproduction and supplied separate from the text but allocated clearly to sections of the text.

Contributors receive a set of proofs, together with an order form for offprints. Fifty offprints are supplied free; additional copies will be supplied at cost if ordered prior to publication. Excessive corrections may be charged to the contributor.

Manuscripts (preferably two copies) should be sent to:
THE EDITORS,
GLASGOW MATHEMATICAL JOURNAL,
UNIVERSITY OF GLASGOW, DEPARTMENT OF MATHEMATICS,
UNIVERSITY GARDENS, GLASGOW G12 8QW, U.K.