

PROCEEDINGS

OF THE

EDINBURGH MATHEMATICAL SOCIETY

CONTENTS

MARK V. LAWSON: The natural partial order on an abundant semigroup	<i>page 169</i>
VICTORIA GOULD: Divisible S -systems and R -modules	<i>page 187</i>
A. A. MEHRVARZ AND D. A. R. WALLACE: On the automorphisms of the group ring of a unique product group	<i>page 201</i>
D. A. R. WALLACE: On the centre and residual finiteness of the automorphism group of a group ring	<i>page 207</i>
P. A. BINDING AND K. SEDDIGHI: Elliptic multiparameter eigenvalue problems	<i>page 215</i>
ALAN L. HORWITZ AND LEE A. RUBEL: The space of totally bounded analytic functions	<i>page 229</i>
G. CIECIURA AND A. M. GRUNDLAND: Geometrical aspects of the system $ \nabla v ^2 = \alpha(v)$, $\nabla^2 v = \beta(v)$ and applications to the nonlinear wave equation	<i>page 247</i>
A. CAÑADA: Nonlinear boundary value problems for elliptic systems	<i>page 257</i>
R. BAÑUELOS AND B. ØKSENDAL: Exit times for elliptic diffusions and BMO	<i>page 273</i>
FRANCES KIRWAN: Some examples of minimally degenerate Morse functions	<i>page 289</i>
M. J. JAMIESON: Application of Wynn's epsilon algorithm to periodic continued fractions	<i>page 295</i>
LUCAS JODAR: Explicit expressions for Sturm–Liouville operator problems	<i>page 301</i>
W. L. EDGE: Geometry relevant to the binary quintic	<i>page 311</i>
PATRICK J. BROWNE AND B. D. SLEEMAN: Corrigenda: Inverse multi-parameter eigenvalue problems for matrices II	<i>page 323</i>
BOOK REVIEWS	<i>page 325</i>

SCOTTISH ACADEMIC PRESS

PROCEEDINGS

OF THE

EDINBURGH MATHEMATICAL SOCIETY

EDITORS

T. S. BLYTH
University of St Andrews

T. A. GILLESPIE
University of Edinburgh

C. J. SHADDOCK
University of Edinburgh

C. M. CAMPBELL
University of St Andrews

J. R. HUBBUCK
University of Aberdeen

B. D. SLEEMAN
University of Dundee

CONSULTING EDITORS

Sir **MICHAEL ATIYAH, F.R.S.**
Mathematical Institute
24–29 St Giles
Oxford OX1 3LB

G. BROWN
Department of Pure Mathematics
University of New South Wales
P.O. Box 1
New South Wales 2033
Australia

D. L. COLTON
Math. Sci. Department
University of Delaware
Newark DE 19711
U.S.A.

P. A. FILLMORE
Department of Mathematics,
Statistics and Computing Science
Dalhousie University
Halifax, Nova Scotia
Canada B3H 3J5

C. M. GORDON
Department of Mathematics
University of Texas at Austin
Austin, Texas 78712
U.S.A.

A. M. MACBEATH
Department of Mathematics
and Statistics
University of Pittsburgh
Pittsburgh PA 15260
U.S.A.

J. B. McLEOD
Wadham College
Oxford OX1 3PN

C. St. J. A. NASH-WILLIAMS
Department of Mathematics
University of Reading
Whiteknights
Reading RG6 2AX

D. J. S. ROBINSON
Department of Mathematics
University of Illinois at Urbana
Urbana, IL 61801
U.S.A.

C. A. STUART
Département de Mathématiques
MA (ECUBLENS)
CH-1015 Lausanne
Switzerland