

PEAMDU 91(175–360) 1982

Volume 91: Parts 3/4

THE ROYAL SOCIETY OF EDINBURGH



PROCEEDINGS

Section **A** (Mathematics)

ISSN 0308–2105

PUBLISHED BY THE ROYAL SOCIETY OF EDINBURGH
22 GEORGE STREET, EDINBURGH, EH2 2PQ

1982

EDITORIAL BOARD

Executive Editors

J. DUNCAN
University of Stirling

W. N. EVERITT
University of Dundee

R. J. KNOPS
Heriot-Watt University

J. M. BALL
Heriot-Watt University
T. S. BLYTH
University of St Andrews
F. F. BONSALE
University of Edinburgh
J. W. S. CASSELS
University of Cambridge
P. HEYWOOD
University of Edinburgh

A. JEFFREY
University of Newcastle upon Tyne
J. B. McLEOD
University of Oxford
W. D. MUNN
University of Glasgow
E. M. PATTERSON
University of Aberdeen
G. F. ROACH
University of Strathclyde

R. M. S. SMELLIE
General Secretary
Royal Society of Edinburgh

W. H. RUTHERFORD
Executive Secretary
Royal Society of Edinburgh

Consulting Editors

H. AMANN
Universität Zürich
F. M. ARSCOTT
University of Manitoba
F. V. ATKINSON
University of Toronto
H. BREZIS
Université de Paris VI
R. CONTI
Istituto Matematico, Firenze, Italy
M. S. P. EASTHAM
Chelsea College, London
D. E. EDMUNDS
University of Sussex
AVNER FRIEDMAN
Northwestern University, Evanston,
Illinois, USA
J. K. HALE
Brown University, Providence, RI, USA
P. R. HALMOS
University of Indiana, Bloomington,
USA
E. M. DE JAGER
Universiteit van Amsterdam
TOSIO KATO
University of California, Berkeley, USA
J. KURZWEIL
Matematický ústav ČSAV, Praha,
Czechoslovakia

J. MAWHIN
Université Catholique de Louvain
A. PAZY
The Hebrew University of Jerusalem
ÅKE PLEIJEL
University of Uppsala, Sweden
G. B. PRESTON
Monash University, Clayton, Australia
G.-C. ROTA
Massachusetts Institute of Technology,
USA
DAVID L. RUSSELL
University of Wisconsin, Madison, USA
F. STUMMEL
Johann Wolfgang-Goethe University,
Frankfurt am Main, Germany
F. URSELL
University of Manchester
P. WALTMAN
University of Iowa
W. WENDLAND
Technische Hochschule Darmstadt
J. WERMER
Brown University, Providence, RI, USA
A. ZETTL
Northern Illinois University, De Kalb,
USA

PROCEEDINGS
OF
THE ROYAL SOCIETY OF EDINBURGH

PROCEEDINGS
OF
THE ROYAL SOCIETY
OF EDINBURGH

Section A (Mathematics)

VOL. 91

1982

PUBLISHED BY
THE ROYAL SOCIETY OF EDINBURGH
22 GEORGE STREET
EDINBURGH EH2 2PQ

1982