

# JOURNAL of the AUSTRALIAN MATHEMATICAL SOCIETY

Series A — Pure Mathematics and Statistics

Volume 31 Part 1

JUNE 1981

DAVID CROCKER and IAIN RAEBURN	<i>Toeplitz operators on certain weakly pseudoconvex domains</i> . . . . .	1
P. R. SCOTT	<i>On simplices and lattice points</i> . . . . .	15
MICHAEL D. HIRSCHHORN	<i>Infinitely many identities of Kolberg type</i> . . . . .	20
D. N. SARKHEL and A. K. DE	<i>The proximally continuous integrals</i> . . . . .	26
RICHARD BECKER	<i>Mesures coniques et intégrale de Daniell</i> . . . . .	46
AKITAKA KISHIMOTO and DEREK W. ROBINSON	<i>Subordinate semigroups and order properties</i> . . . . .	59
U. MADDANA SWAMY and G. C. RAO	<i>Almost distributive lattices</i> . . . . .	77
A. J. PRYDE	<i>Higher order elliptic boundary value problems in spaces with homogeneous norms</i> . . . . .	92
GARY DAVIS and STEPHEN H. MCCLEARY	<i>The lateral completion of a completely distributive lattice-ordered group (revisited)</i> . . . . .	114

The Journal of the Australian Mathematical Society began publication in 1959, and from 1975 has appeared in two series, Series A (Pure Mathematics and Statistics) and Series B (Applied Mathematics). Information about Series B may be found on the inside back cover.

### Series A, Pure Mathematics and Statistics

Submission of research papers in pure mathematics and mathematical statistics is invited. Authors intending to submit papers for publication should prepare the typescript following the instructions on the back cover of this issue, and should send two complete copies to the Editor, or to an appropriate Associate Editor.

Six parts are planned for 1981, consisting of parts 3 and 4 of Volume 30 and all four parts of Volume 31. The price to non-members will be A\$90; to ordinary members will be A\$15.

### Editor of the Journal, Series A

H. Lausch, Department of Mathematics, Monash University, Clayton, Victoria 3168.

#### Associate Editors

Gavin Brown—harmonic analysis,  
Department of Mathematics,  
University of New South  
Wales, P.O. Box 1,  
Kensington, N.S.W. 2033

J. N. Crossley—logic,  
Department of Mathematics,  
Monash University,  
Clayton, Victoria 3168

T. E. Hall—semigroups,  
Department of Mathematics,  
Monash University,  
Clayton, Victoria 3168

R. Lidl—algebra,  
Department of Mathematics,  
University of Tasmania,  
Box 252C, G.P.O., Hobart,  
Tasmania 7001

K. Mackenzie—differential geometry,  
Department of Mathematics,  
Institute of Advanced Studies,  
The Australian National  
University,  
P.O. Box 4, Canberra,  
ACT. 2600

J. B. Miller—functional analysis,  
Department of Mathematics,  
Monash University,  
Clayton, Victoria 3168

B. Mond—operations research, programming, games,  
Department of Pure Mathematics,  
La Trobe University,  
Bundoora, Victoria 3083

W. Moran—harmonic analysis,  
Department of Pure Mathematics,  
University of Adelaide,  
G.P.O. Box 498, Adelaide,  
S.A. 5001

G. R. Morris—differential equations,  
Department of Mathematics,  
University of New England,  
Armidale, N.S.W. 2351

J. H. Rubinstein—topology,  
Department of Mathematics,  
University of Melbourne,  
Parkville, Victoria 3052

R. H. Street—categories,  
School of Mathematics & Physics,  
Macquarie University,  
North Ryde, N.S.W. 2113

E. Strzelecki—analysis,  
Department of Mathematics,  
Monash University,  
Clayton, Victoria 3168

D. E. Taylor—groups,  
Department of Pure Mathematics,  
University of Sydney,  
Sydney, N.S.W. 2006

R. L. Tweedie—probability and statistics,  
Division of Mathematics and Statistics,  
CSIRO, P.O. Box 310,  
South Melbourne, Victoria 3205

A. J. van der Poorten—number theory,  
School of Mathematics and Physics,  
Macquarie University,  
North Ryde, N.S.W. 2113

R. O. Vyborny—abstract analysis, partial differential equations, complex functions in one variable,

Department of Mathematics,  
University of Queensland,  
St. Lucia, Queensland 4067

W. Wallis—combinatorics,  
Department of Mathematics,  
University of Newcastle,  
Newcastle, N.S.W. 2308

#### Assistant Editors

G. Virsik,  
Department of Mathematics,  
Monash University,  
Clayton, Victoria 3168

R. T. Worley,  
Department of Mathematics,  
Monash University,  
Clayton, Victoria 3168

Correspondence concerning the printing of papers after their acceptance for publication should be addressed to G. Virsik.

*Journal of the Australian Mathematical Society, Series A—Pure Mathematics and Statistics* is published bimonthly by the Australian Mathematical Society, Department of Mathematics, University of Queensland, St. Lucia, Qld 4067, Australia. Application to mail at second class postage rates is pending at Ann Arbor, Michigan 48106. Postmaster: Send address change notices to Professor V. G. Hart, Journal of the Australian Mathematical Society, Department of Mathematics, University

**JOURNAL**  
**of the**  
**AUSTRALIAN MATHEMATICAL SOCIETY**

Series A — Pure Mathematics and Statistics

Volume 31 1981