

BULLETIN Volume **19 (1978)**

of the Australian Mathematical Society

Number **1**

S. D. Scott	<i>A construction of monogenic near-ring groups, and some applications</i>	1
Dorothy Maharam and A. H. Stone	<i>Realizing isomorphisms of category algebras</i>	5
G. E. Wall	<i>On the Lie ring of a group of prime exponent II</i>	11
J. Prasad	<i>On the rate of convergence of interpolation polynomials of Hermite-Fejér type</i>	29
G. M. Petersen	<i>A sequence algebra associated with distributions</i>	39
J. Parida and B. Sahoo	<i>An existence theorem for the generalized complementarity problem</i>	51
H. Mitsch	<i>Inverse semigroups and their natural order</i>	59
F. Fejér	<i>A note on a paper of E. R. Love</i>	67
K. H. Kulkarni	<i>Minimally locally 1-connected graphs</i>	77
R. K. Singh and Ashok Kumar	<i>Characterizations of invertible, unitary, and normal composition operators</i>	81
Julius M. Zelmanowitz	<i>Semisimple rings of quotients</i>	97
J. L. Hickman	<i>Dedekind-finite fields</i>	117
A. Ghosal	<i>A result in queueing theory</i>	125
P. R. Scott	<i>Two inequalities for convex sets in the plane</i>	131
B. J. Day	<i>Duality in topological algebra: Addendum</i>	157
Michael A. B. Deakin	<i>New proofs of some theorems on infinitely differentiable functions: Corrigenda</i>	159
Abstracts of Australasian PhD theses		
Sahala M. Nababan	<i>On the optimal control of delay differential systems</i>	135
A. K. Laing	<i>Stably layered fluids</i>	138
Elizabeth Jane Morgan	<i>Construction of block designs and related results</i>	139
Sam Choy	<i>One- and two-locus inbreeding for recurrent selection and overlapping generations selection schemes</i>	141
M. A. Cameron	<i>The analysis of transient signals and stationary noise</i>	143
Pamela Joy Davy	<i>Stereology—a statistical viewpoint</i>	145
Mario M. Milman	<i>Some new function spaces and their tensor products</i>	147
Krisorn Jittorntrum	<i>Sequential algorithms in nonlinear programming</i>	151
Russel James Stonier	<i>Liapunov theory applied to control, games, and boundedness of generalized dynamical systems</i>	155

THE AUSTRALIAN MATHEMATICAL SOCIETY

President: J. M. Gani
Secretary: D. G. Hurley
Treasurer: V. G. Hart

Division of Mathematics and Statistics, CSIRO.
Department of Mathematics,
University of Western Australia,
Nedlands, WA 6009, Australia
Department of Mathematics,
University of Queensland
St Lucia, Queensland 4067, Australia.

(These officers serve until May 1979)

Membership and correspondence

Applications for membership, notices of change of address or title or position, and other correspondence, except as noted below, should be sent to the Secretary (address above). Subscriptions and correspondence related to accounts should be sent to the Treasurer (address above). Correspondence about the distribution of the Society's JOURNAL, BULLETIN, and GAZETTE, and orders for back numbers, should be sent to the Business Manager, whose address is the same as the Treasurer's (above).

Publications

The JOURNAL of the Australian Mathematical Society began publication in 1959, and since 1975 has appeared in two series, Series A (Pure Mathematics) and Series B (Applied Mathematics). The Editors are:

(A) Professor J. B. Miller,
Department of Mathematics,
Monash University,
Clayton, Victoria 3168, Australia.

(B) Professor I. H. Sloan,
School of Mathematics,
University of New South Wales,
Kensington, NSW 2033, Australia.

The BULLETIN of the Australian Mathematical Society began publication in 1969. Two volumes of three numbers each are published annually. Manuscripts for publication should be sent to the Editor.

Dr B. H. Neumann,
Department of Mathematics,
Institute of Advanced Studies,
Australian National University,
POB 4, Canberra, ACT 2600, Australia,

or to the Associate Editor, Dr L. G. Kovács, at the same address.

The Australian Mathematical Society GAZETTE started publication in 1974, and carries news items, mathematical articles of general interest, and articles on tertiary mathematics teaching. Manuscripts for publication should be sent to the Editor at the

School of Mathematics,
University of New South Wales,
Kensington, NSW 2033, Australia.

© Copyright by Australian Mathematical Society 1978

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.

(Continued inside back cover)