

JOURNAL of the AUSTRALIAN MATHEMATICAL SOCIETY

Series A — Pure Mathematics and Statistics

Volume 48 Part 1

FEBRUARY 1990

| | | |
|---|---|-----|
| JOHN BORIS MILLER | <i>The associated order of a preorder</i> | 1 |
| RICHARD N. BALL and ANTHONY W. HAGER | <i>Epicompletion of archimedean l-groups and vector lattices with weak unit</i> | 25 |
| R. G. M. BRUMMELHUIS | <i>A note on Riesz sets and lacunary sets</i> | 57 |
| H. MITSCH | <i>Subdirect products of E-inversive semigroups</i> | 66 |
| J. I. OKUTOYI | <i>On the spectrum of C_1 as an operator on bv_0</i> | 79 |
| GYÖRGY POLLÁK | <i>Growth sequence of globally idempotent semigroups</i> | 87 |
| WOLFGANG STADJE | <i>A new approach to the distribution of the duration of the busy period for a $G/G/1$ queueing system</i> | 89 |
| JI GAO and KA-SING LAU | <i>On the geometry of spheres in normed linear spaces</i> | 101 |
| XUAN THINH DUONG | <i>H_∞ functional calculus of elliptic operators with C^∞ coefficients on L^p spaces of smooth domains</i> | 113 |
| R. N. MOHAPATRA and K. VAJRAVELU | <i>Integral inequalities resembling Copson's inequality</i> | 124 |
| CLIFFORD BERGMAN and RALPH MCKENZIE | <i>Minimal varieties and quasivarieties</i> | 133 |
| KUNG-WEI YANG | <i>On the product $\prod_{n \geq 1} (1 + q^n x + q^{2n} x^2)$</i> | 148 |
| DAREN B. H. CLINE | <i>Convolutions of distributions with exponential and subexponential tails: Corrigendum</i> | 152 |
| E. BOMBIERI and A. J. VAN DER POORTEN | <i>Some quantitative results related to Roth's theorem: Corrigenda</i> | 154 |
| MAURO BILIOTTI and GABOR KORCHMAROS | <i>Collineation groups preserving an oval in a projective plane of odd order</i> | 156 |

Set by the American Mathematical Society

Printed by Cushing-Malloy, Inc., Ann Arbor, Michigan, U.S.A.

THE JOURNAL

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 below, and should send two complete copies to the Editor, or to an appropriate Associate Editor (see back cover of this issue).

Two volumes of three parts each are planned for 1990. These are Volume 48 and Volume 49. The annual subscription price to non-members is A\$192.00 (US\$150.00) for 1990.

PREPARATION OF TYPESCRIPTS

1. The author should keep a complete copy of the submitted article; the Society will not accept responsibility for any loss.

2. Each typescript should include (i) an abstract of not more than 150 words, preferably containing no formulae, and certainly containing no complicated formulae and no references, (ii) a 1980 Mathematics subject classification (Amer. Math. Soc.) (1985 Revision), (iii) if the title is long, a shortened form of it, no more than forty characters in length, including spaces.

3. The article should be typed or photocopied on high quality A4 or quarto bond paper, on one side only, with at least double spacing, and with a generous margin (at least 3 cm) all around.

4. The conventions of *A manual for authors of mathematical papers* published by the American Mathematical Society should be observed. Two alternative styles for references and quotations are described below. Authors are requested to use one and only one style consistently throughout their typescript.

STYLE 1. A typical reference in the list of references would be

T. M. Cherry (1965), "Infinite linear systems with homogeneous kernel of degree -1 ", *J. Austral. Math. Soc.* **5**, 129–168.

A corresponding reference in the text would be: Cherry (1965), p. 155.

STYLE 2. A typical reference in the list of references would be

[3] L. Grüşchen, "Pseudo-quasi-ergodic theorems", *J. Austral. Math. Soc.* **4** (1960), 2–3.

A corresponding reference in the text would be: Grüşchen [3]; or ([3], [4], [9]); or Grüşchen [2, 3]; or Grüşchen [3, Theorem 1].

In either style, the list of references should be in alphabetical order of surnames of first authors.

5. Explain clearly what symbols are to be set in special typefaces (such as cursive, fraktur, script, bold) and what is required with any unusual symbols (which should wherever possible be chosen from symbols available to the printer).

6. Avoid abbreviations, such as Thm., Prop., Ex., iff, i.e., e.g., \forall , \exists , \Rightarrow , and \Leftrightarrow .

7. Authors should provide diagrams (except for category theory type diagrams), drawn to professional standards.

8. Authors are encouraged to submit their papers in $\text{AMS-}\text{T}_{\text{E}}\text{X}$.

Journal of the Australian Mathematical Society, Series A — Pure Mathematics and Statistics, is published bimonthly by the Australian Mathematical Society, c/-Department of Mathematics, University of Queensland, St. Lucia, Qld. 4067, Australia. Second class postage is paid at Ann Arbor, Michigan 48106. Postmaster: Send address change notices to Dr B. D. Jones, Australian Mathematical Society, c/-Department of Mathematics, University of Queensland, St. Lucia, Qld. 4067, Australia.

JOURNAL
of the
AUSTRALIAN MATHEMATICAL SOCIETY

Series A — Pure Mathematics and Statistics

Volume 48 1990