

# JOURNAL of the AUSTRALIAN MATHEMATICAL SOCIETY

Volume 71 Part 1  
AUGUST 2001

ARUP BOSE and S. CHATTERJEE	<i>Last passage times of minimum contrast estimators</i>	1
JOHN DAUNS	<i>Goldie dimensions of quotient modules</i> . . . . .	11
J. A. HERNÁNDEZ and J. SANZ	<i>Gérard-Sibuya's versus Majima's concept of asymptotic expansion in several variables</i> . . . . .	21
K. G. JOHNSTON-THOM and PETER R. JONES	<i>Semidistributive inverse semigroups</i> . . . . .	37
G. C. HRUSKA and DANIEL T. WISE	<i>Towers, ladders and the B. B. Newman Spelling Theorem</i> . . . . .	53
FRANZISKA BAUR	<i>Lacunarity on nonabelian groups and summing operators</i> . . . . .	71
ANTHONY G. PAKES	<i>Remarks on converse Carleman and Krein criteria for the classical moment problem</i> . . . . .	81
VALERIÏ FAÏZIEV	<i>A problem of expressibility in some amalgamated products of groups</i> . . . . .	105
YASUSHI NINOMIYA	<i>Nilpotency indices of the radicals of finite <math>p</math>-solvable group algebras, I</i> . . . . .	117
MICHAEL A. B. DEAKIN	<i>The characterisation of scoring functions</i> . . . . .	135

Formerly  
Journal of the Australian Mathematical Society  
(Series A — Pure Mathematics and Statistics)

Information about other publications of the Australian Mathematical Society may be found on the inside back cover.

Submission of research papers in pure mathematics and statistics is invited. Authors intending to submit papers for publication should prepare the manuscript 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 2001. These are Volume 70 and Volume 71. The annual subscription price to non-members is A\$398.20 (US\$293.00) for 2001.

#### PREPARATION OF MANUSCRIPTS

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

2. The author should keep a complete copy of the submitted article as well as any electronic source; the Society will not accept responsibility for any loss.

3. Authors are encouraged to prepare their papers in  $\text{\LaTeX}$ ; further information on preparation of manuscripts is available on the Journal's web page at <http://www.ms.unimelb.edu.au/~jams>. Other forms of electronic source will usually also be useful.

4. Each manuscript 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 2000 Mathematics subject classification, (iii) if the title is long, a shortened form of it, no more than forty characters in length, including spaces.

5. Two alternative styles for references and quotations are described below. Authors are requested to use one and only one style consistently throughout their manuscript.

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

[3] T. M. Cherry, 'Infinite linear systems with homogeneous kernel of degree  $-1$ ', *J. Austral. Math. Soc.* **5** (1965), 129–168.

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

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

[GBP] G. B. Preston, 'Monogenic inverse semigroups', *J. Austral. Math. Soc.* **40** (1986), 321–342.

A corresponding reference in the text would be: Preston [GBP]; or ([GBP, KG, GHL]); or Preston [GBP, Proposition 1].

In either style, the list of references should be in alphabetical order of surnames of first authors. Abbreviations for journal names should follow the practice of Mathematical Reviews.

6. Explain clearly what symbols are to be set in special typefaces (such as cursive, fraktur, script, bold) where this is not clear from the manuscript or electronic source.

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

8. Authors should provide diagrams drawn to professional standards. Diagrams in the form of encapsulated Postscript files, or similar, may be acceptable; the quality, however, should be similar to that obtained by a professional artist.

*Journal of the Australian Mathematical Society*, is published bimonthly by the Australian Mathematical Society, c/- Mathematics Department, Australian National University, Canberra, ACT 0200, Australia. Send address change notices to Dr A. Howe, Australian Mathematical Society, c/- Mathematics Department, Australian National University, Canberra, ACT 0200, Australia.

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

Volume 71 2001