

# JOURNAL of the AUSTRALIAN MATHEMATICAL SOCIETY

Series A — Pure Mathematics and Statistics

Volume 60 Part 2

APRIL 1996

HONGDE HU	<i>Flat functors and free exact categories</i> .....	143
STEFAN HILGER	<i>Generalized theorem of Hartman-Grobman on measure chains</i> .....	157
RICHARD J. MCINTOSH	<i>Franel integrals of order four</i> .....	192
JOHN C. QUIGG	<i>Discrete <math>C^*</math>-coactions and <math>C^*</math>-algebraic bundles</i>	204
HOWARD SMITH and JAMES WIEGOLD	<i>Locally graded groups with all subgroups normal- by-finite</i> .....	222
W. W. L. CHEN	<i>On irregularities of distribution III</i> .....	228
SEOK CHAN KIM	<i>Coefficients of an analytic function subordination class determined by rotations</i> .....	245
A. YU. OL'SHANSKII and A. STOROZHEV	<i>A group variety defined by a semigroup law</i> ....	255
R. C. VAUGHAN	<i>On the eigenvalues of Redheffer's matrix, II</i> ....	260
RHONDA J. HUGHES and PAUL R. CHERNOFF	<i>Some examples related to Kato's conjecture</i> ....	274

## 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 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 1996. These are Volume 60 and Volume 61. The annual subscription price to non-members is A\$295.00 (US\$236.00) for 1996.

### 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 3 cm) 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 L<sup>A</sup>T<sub>E</sub>X; further information on preparation of manuscripts is available on the Journal's web page at <http://www.maths.mu.oz.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 1991 Mathematics subject classification (Amer. Math. Soc.), (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, Series A — Pure Mathematics and Statistics*, is published bimonthly by the Australian Mathematical Society, c/-Mathematics Department, Australian National University, Canberra, ACT 0200, Australia. Second class postage is paid at Ann Arbor, Michigan 48106. Postmaster: Send address change notices to Dr. A. Howe, Australian Mathematical Society, c/-Mathematics Department, Australian National University, Canberra, ACT 0200, Australia.