JOURNAL of the AUSTRALIAN MATHEMATICAL SOCIETY

Series A — Pure Mathematics and Statistics Volume 57 Part 1 AUGUST 1994

DEREK F. HOLT and SARAH REES	Testing modules for irreducibility	1
CHERYL E. PRAEGER	Kronecker classes of fields and covering subgroups of finite groups	17
PETER ROWLEY	Sporadic group geometries and the action of invol- utions	35
WAYNE W. WHEELER	The nuclear length of a character	49
YOAV SEGEV and PETER WEBB	Extensions of G-posets and Quillen's complex	60
MICHAEL C. SLATTERY	Character degrees and nilpotence class in p-groups	76
I. M. ISAACS	The π -character theory of solvable groups	81
MARSTON CONDER	Regular maps with small parameters	103
D. E. TAYLOR and MING-YAO XU	Vertex-primitive half-transitive graphs	113
J. L. ALPERIN and GEORGE GLAUBERMAN	Coverings and coverings	125

Set by Te χ Adel, Adelaide, Australia. 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 1994. These are Volume 56 and Volume 57. The annual subscription price to non-members is A\$227.00 (US\$172.00) for 1994.

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 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.

3. The article should be typed, printed 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. 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. Grüschen, "Pseudo-quasi-ergodic theorems", J. Austral. Math. Soc. 4 (1960), 2-3.

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

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, Australian National University, Canberra, ACT 0200, Australian Mathematical Society, c/-Mathematics Department, Australian National University, Canberra, ACT 0200, Australian National University, Canberra, ACT 0200, Australia.

JOURNAL

of the

AUSTRALIAN MATHEMATICAL SOCIETY

Series A – Pure Mathematics and Statistics

Volume 57 1994

Special issue

on

Group Theory

Papers solicited and edited by L. G. Kovács

https://doi.org/10.1017/S1446788700035990 Published online by Cambridge University Press