

MATHEMATICAL PROCEEDINGS
of the
CAMBRIDGE PHILOSOPHICAL SOCIETY

The Cambridge Philosophical Society was founded in 1819 for the purpose of promoting scientific enquiries and of communicating the results. The Fellows of the Society met regularly to read and discuss papers.

In 1844, Volume 1 of the *Proceedings* was published. In 1923, a separate journal was started, the *Biological Reviews*, and thereafter the scope of the *Proceedings* was restricted to mathematical and physical sciences. For several years now, although the title *Proceedings of the Cambridge Philosophical Society* suggests a journal of general science, it has contained only papers on pure and applied mathematics.

The Council of the Cambridge Philosophical Society has therefore decided, whilst retaining the numbering of the volumes, to insert the word Mathematical into the title, starting with Volume 77 in January 1975. The publication in each year of two volumes of the existing size will continue, a volume consisting of three parts issued at two-monthly intervals.

C O N T E N T S

	PAGE
FRÖHLICH, A. Module invariants and root numbers for quaternion fields of degree $4l^r$	393
MOSKOWITZ, M. On pro-reductive groups	401
LILLINGTON, J. N. A conjecture for polytopes	407
GARLING, D. J. H. Operators with large trace, and a characterization of L_n^∞	413
BERNAU, S. J. Products of positive operators	415
MAHLER, K. On the digits of the multiples of an irrational p -adic number	417
HEADING, J. The Stokes phenomenon and generalized contiguous transformations of some generalized hypergeometric functions	423
CASH, J. R. The numerical solution of systems of stiff ordinary differential equations	443
KARWOWSKI, W. On Borchers class of Markoff fields	457
EVANS, G. Infinitesimal bundles and projective relativity	465
RAWNSLEY, J. H. De Sitter symplectic spaces and their quantizations	473
CHADWICK, P. and CURRIE, P. K. Intrinsically characterized acceleration waves in heat-conducting elastic materials	481

© The Cambridge Philosophical Society, 1974

Printed in Great Britain at the University Printing House, Cambridge