NOTES FOR AUTHORS

Proceedings of the Royal Society of Edinburgh: Section A is a general journal, and papers in all areas of mathematics will be considered. Papers to be considered for publication should be sent to the Publications Manager, The Royal Society of Edinburgh, 22 George Street, Edinburgh EH2 2PQ, Scotland.

A paper by more than one author must be submitted with a statement, signed by each author, to the effect that the paper in its entirety is approved by the joint authors and naming the author who will be responsible for correspondence with the Society.

Authors will receive fifty (50) offprints free of charge, this number to be shared between joint authors. Additional offprints may be obtained, in units of fifty, at a fixed scale of prices given on a form which will be attached to the proof.

Authors must prepare their papers as concisely as possible. Manuscripts should be submitted in triplicate, on single-sided A4 paper, double spaced with adequate margins. Authors are advised to retain a copy of their papers as the Society cannot accept responsibility for any loss.

Every paper must be accompanied by a Synopsis, in general not exceeding two hundred words, which will be printed in small type at the beginning of the paper.

References within the text should be indicated by bold numbers in square brackets, e.g. [2] or [3, p. 167]. References at end of text should be in alphabetical order, numbered sequentially.

Authors should ensure that punctuation carries through the mathematics in the proper manner. The use of hyphens should be consistent. In the text avoid such abbreviations as: iff, w.r.t. and thm.

Footnotes should be avoided. Headings should not be underlined. Every effort should be made to avoid complicated subscripts, superscripts, ranges of summation and integration. Horizontal fraction signs should normally be avoided: use either solidus signs / or negative exponents. Replace $e^{(...)}$ by exp [...] if the expression in parenthesis is complicated. Use the prime ' or d/dx, but preferably not a dot, to denote ordinary differentiation. If possible use subscripts to denote partial differentiation of $\partial/\partial x$ etc. Bars reaching over several letters should be avoided: use $\sqrt{()}$ or the exponent 1/2 for the square root. Subscripts and superscripts should be avoided if possible.

Note that confusion very often arises between 1 (one) and l (ell): 0 (zero) and O (Capital oh): \circ (composition) and o (lower case oh): x and \times : U and \bigcirc : c and \subseteq : \in (belongs to) and ε (epsilon): \emptyset (empty set) and ϕ (phi): $_1$ and comma ,: prime ' and 1 : K and κ : p and ρ : w and ω : \sum (summation) and Σ (capital sigma): \prod (product) and Π (capital pi): v (lower case vee) and v (Greek *nu*): a (lower case a) and α (Greek alpha): y (lower case y) and γ (Greek gamma). Please provide pencilled indicators in the margin where necessary. Where capitals and lower case of the same shape have to be printed, please indicate accordingly. Show italics by single underlining (except in the formulae which are set up normally in italics), bold face/Clarendon by wavy underlining and Greek by red underlining.

The statement of theorems, lemmas, et cetera, will be printed in italics and should be underlined. In definitions key words only should be in italics.

Equations should be indicated by numbers in parentheses in the right-hand margin.

Proofs of papers will be sent to the author. The cost of *authors' corrections in excess of five per cent* of the printers' charge for the setting of a particular paper will be charged to the author.

Copyright

© 1994 The Royal Society of Edinburgh and the authors of individual papers.

It is the policy of the Royal Society of Edinburgh not to charge any royalty for the production of a single copy of any one article made for private study or research. Specific permission will not be required for photocopying multiple copies of copyright material, to be used for *bona fide* educational purposes, provided this is done by a member of the staff of the university, school or other comparable institution, for distribution without profit to student members of that institution and provided the copies are made from the original journal. Requests for the copying or reprinting of any article for any other purpose should be sent to the Royal Society of Edinburgh, 22/24 George Street, Edinburgh EH2 2PQ. Telephone (031) 225 6057. Fax (031) 220 6889.

PROCEEDINGS OF THE ROYAL SOCIETY OF EDINBURGH

(Section A)

Volume 124	1994 I	Part 3
	CONTENTS	
F BONNETTER and C CO		
Approximation of problem of optimal	Young measures by functions and application to a design for plates with variable thickness	399
LUCINDA M. LIMA	5	
Nilpotent local auto	omorphisms of an independence algebra	423
GERO FRIESECKE		
A necessary and suf	fficient condition for nonattainment and formation of	
microstructure almo	ost everywhere in scalar variational problems	437
L. A. PELETIER and W. C	C. TROY	
Self-similar solution	as for diffusion in semiconductors	473
SHIN-HWA WANG	6	
Positive solutions	for a class of nonpositone problems with concave	607
VICTOR A GALAKTIONO	N .	507
Blow-up for quasili	v near heat equations with critical Fujita's exponents	517
ANA CRISTINA RARROSO	and IRENE FONSECA	517
Anisotropic singula	r perturbations — the vectorial case	527
PETER HESS and P. POLÁ	ČIK	
Symmetry and conv	vergence properties for non-negative solutions of non-	
autonomous reactio	on-diffusion problems	573
ATHANASIOS N. LYBEROP	POULOS	
A Poincaré-Bendix	son theorem for scalar balance laws	589
YAPING LIU		
On a class of semilin	near eliptic systems	609

ISSN 0308-2105

Proc. Roy. Soc Edinb., A 124

Published by the Royal Society of Edinburgh Printed by The Charlesworth Group, Huddersfield Distributed by CAB International, Wallingford