

MATHEMATICAL PROCEEDINGS

(formerly Proceedings)

*of the
Cambridge Philosophical Society*

VOLUME 150



CAMBRIDGE
UNIVERSITY PRESS

Published by the Press Syndicate of the University of Cambridge
The Pitt Building, Trumpington Street, Cambridge CB2 1RP, United Kingdom

CAMBRIDGE UNIVERSITY PRESS

The Edinburgh Building, Cambridge CB2 8RU, United Kingdom
32 Avenue of the Americas, New York, NY 10013–2473, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
C/Orense, 4, planta 13, 28020 Madrid, Spain
Lower Ground Floor, Nautica Building, The Water Club, Beach Road,
Granger Bay, Cape Town 8005, South Africa

© Cambridge Philosophical Society 2011

Printed in the United Kingdom by the University Press, Cambridge

INDEX FOR VOLUME 150

	PAGE
Agarwal, N. Inflation of strongly connected networks	367
Barrera Vargas, W. D. J., Cordero, A. C. & Carrillo, J. P. N. The limit set of discrete subgroups of $PSL(3, \mathbb{C})$	129
Bingham, N. H. & Ostaszewski, A. J. Dichotomy and infinite combinatorics: the theorems of Steinhaus and Ostrowski	1
Brander, D. Singularities of spacelike constant mean curvature surfaces in Lorentz–Minkowski space	527
Buck, D. & Mauricio, M. Connect sum of lens spaces surgeries: application to H_{in} recombination	505
Bugeaud, Y. & Moshchevitin, N. Badly approximable numbers and Littlewood-type problems .	215
Caprace, P.-E. & Monod, N. Decomposing locally compact groups into simple pieces	97
Cheng, E. Iterated distributive laws	459
Civan, G., Koprowski, P., Etnyre, J., Sabloff, J. M. & Walker, A. Product structures for Legendrian contact homology.	291
Dobbs, N. Nice sets and invariant densities in complex dynamics	157
Ellis, D. Irredundant families of subcubes	257
Enescu, F. & Yao, Y. The lower semicontinuity of the Frobenius splitting numbers	35
Graf, S., Luschgy, H. & Pagès, G. Fractal functional quantization of mean-regular stochastic processes	167
Guralnick, R. M., Navarro, G. & Tiep, P. H. Real class sizes and real character degrees	47
Hough, B. Summation of a random multiplicative function on numbers having few prime factors	193
James, K. & Smith, E. Average Frobenius distribution for elliptic curves defined over finite Galois extensions of the rationals	439
Jordan, T. & Rams, M. Multifractal analysis for Bedford–McMullen carpets	147
Jørgensen, P. & Kato, K. Symmetric Auslander and Bass categories	227
Karabacak, Ö. & Ashwin, P. On statistical attractors and the convergence of time averages	353
Lange, H. & Newstead, P. E. Lower bounds for Clifford indices in rank three	23
Langley, J. K. Non-real zeros of derivatives of real meromorphic functions of infinite order . .	343
McTague, C. Stiefel–Whitney numbers for singular varieties	273
Raouj, A., Stef, A. et Tenenbaum, G. Mesures quadratiques de la proximité des diviseurs	73
Riehl, E. On the structure of simplicial categories associated to quasi-categories	489
Sadek, M. Counting models of genus one curves	399
Sharp, R. Y. & Yoshino, Y. Right and left modules over the Frobenius skew polynomial ring in the F -finite case	419
Strasser, G. Generalisations of the Euler adic	241
Uchida, Y. Valuations of Somos 4 sequences and canonical local heights on elliptic curves . . .	385
Wickstead, A. W. Separable Banach lattices on which every bounded linear operator is regular .	557
Wojciechowski, M. The non-equivalence between the trigonometric system and the system of functions with pointwise restrictions on values in the uniform and L^1 norms	561
Zhao, T. A minimal volume arithmetic cusped complex hyperbolic orbifold	313

INSTRUCTIONS TO AUTHORS

1. Preparation of Manuscripts

A paper should be submitted electronically to mpeditor@hermes.cam.ac.uk in pdf form together with the TeX file as attachment to an e-mail, i.e. not in the body of the e-mail. Authors are encouraged to prepare their manuscripts in LaTeX 2e using the PSP class file. The class file, together with a guide, PSP2egui.tex, and sample pages, PSP2esam.tex, can be downloaded from <ftp://ftp.cambridge.org/pub/texarchive/journals/latex/psp-cls> in either packed or unpacked form. These files will be updated periodically; please ensure that you have the latest version.

A cover page should give the title, the author's name and institution, with the address to which mail should be sent.

The title, while brief, must be informative (e.g. *A new proof of the prime-number theorem*, whereas, *Some applications of a theorem of G. H. Hardy* would be useless).

Authors are asked to provide an abstract as a basis for search on the Web. This may be an explicit abstract at the start of the paper. Otherwise the first paragraph or two should form a summary of the main theme of the paper, providing an abstract intelligible to mathematicians. Please note that the abstract should be able to be read independently of the main text. References should therefore not be included in the abstract.

Authors are encouraged to check that where references are given, they are used in the text. Experience has shown that unused references have a habit of surviving into the final version of the manuscript.

For a typescript to be accepted for publication, it must accord with the standard requirements of publishers, and be presented in a form in which the author's intentions regarding symbols etc. are clear to a printer (who is not a mathematician). Please also check the Cambridge University Press website for information about the style in which the paper should be submitted.

2. Notation

Notation should be chosen carefully so that mathematical operations are expressed with all possible neatness, to lighten the task of the compositor and to reduce the chance of error. For instance n sub k is common usage, but avoid if possible using c sub n sub k . Fractions are generally best expressed by a solidus. Complicated exponentials like:

$$\exp\{z^2 \sin \theta / (1 + y^2)\}$$

should be shown in this and no other way.

It helps if displayed equations or statements which will be quoted later are numbered in order on the right of their line. They can then be referred to by, for example 'from (7)'.
The author must enable the printer (if necessary by pencilled notes in the margin) to distinguish between similar symbols such as o , O , o , O , 0 ; x , X , \times ; ϕ , Φ , \emptyset ; l , 1 ; ϵ , k , κ , k .

Footnotes should be avoided.

Please use typewriter font for all addresses and email addresses.

Omit \square from the end of proofs.

In listing assertions, conclusions, etc. do not use a vertical column of dots and do not follow (a) or (i) by a capital letter (eg. (i) the absolute value . . .)

In making references precise use [3, theorem 5.1]

3. Diagrams

Diagrams should be in black ink or from a high-quality laser printer and should not be larger than 30 cm by 45 cm. Lettering to be inserted by the printer should be shown clearly on copies of the figures rather than on the original drawings. Please note that a charge may be made if hand-drawn diagrams need to be re-drawn for publication.

Figure 1 here

A typed list of captions may be provided at the end of the manuscript in the following format:

Figure 1. *A basis for . . .*

Note that there is no point at the end of the heading. All headings should be centred.

4. Tables

Tables should be numbered (above the table) and set out on separate sheets. Indicate the position of each in the text as for figures:

Table 3 here

Heading for tables should be shown in the following way:

Table I. *A basis for . . .*

Note that there is no point at the end of the heading. All headings should be centred over columns.

5. References

References should be collected at the end of the paper numbered in alphabetical order of the authors' names. Where references are given, they should be used in the text. Titles of journals should be abbreviated as in *Mathematical Reviews*. The following examples show the preferred style for references to a paper in a journal, a paper in a proceedings volume, a book and an unpublished dissertation:

[1] J. F. ADAMS. On the non-existence of elements of Hopf invariant one. *Ann of Math.* (2) **72** (1960), 20-104.

[2] M. P. FOURAM and D. S. SCOTT. Sheaves and logic. *In Applications of Sheaves* Lecture Notes in Math. vol. 753 (Springer-Verlag, 1979), pp. 302-401.

[3] P. T. JOHNSTONE. *Stone Spaces*. Cambridge Studies in Advanced Math. no. 3 (Cambridge University Press, 1982).

[4] F. W. LAWVERE. Functional semantics of algebraic theories. PhD. thesis. Columbia University (1963).

6. Submission of papers accepted for publication

When a paper has been accepted for publication the relevant TeX files of the final version, accompanied by a pdf file, should be sent to the Editor by e-mail.

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

MATHEMATICAL PROCEEDINGS

*of the
Cambridge Philosophical Society*

VOLUME 150 PART 3, pages 385–571, May 2011

CONTENTS

UCHIDA, Y. Valuations of Somos 4 sequences and canonical local heights on elliptic curves	385
SADEK, M. Counting models of genus one curves	399
SHARP, R. Y. & YOSHINO, Y. Right and left modules over the Frobenius skew polynomial ring in the F -finite case	419
JAMES, K. & SMITH, E. Average Frobenius distribution for elliptic curves defined over finite Galois extensions of the rationals	439
CHENG, E. Iterated distributive laws	459
RIEHL, E. On the structure of simplicial categories associated to quasi-categories	489
BUCK, D. & MAURICIO, M. Connect sum of lens spaces surgeries: application to Hin recombination	505
BRANDER, D. Singularities of spacelike constant mean curvature surfaces in Lorentz–Minkowski space	527
WICKSTEAD, A. W. Separable Banach lattices on which every bounded linear operator is regular	557
WOJCIECHOWSKI, M. The non-equivalence between the trigonometric system and the system of functions with pointwise restrictions on values in the uniform and L^1 norms	561

© The Cambridge Philosophical Society 2011

Cambridge Journals Online
For further information about this journal
please go to the journal website at:
journals.cambridge.org/psp



Mixed Sources
Product group from well-managed
forests and other controlled sources
www.fsc.org Cert no. SA-COC-1527
© 1996 Forest Stewardship Council

CAMBRIDGE
UNIVERSITY PRESS