HIROSHIMA MATHEMATICAL JOURNAL

VOLUME 42, NUMBER 2 JULY, 2012

PUBLISHED BY

DEPARTMENT OF MATHEMATICS
GRADUATE SCHOOL OF SCIENCE
HIROSHIMA UNIVERSITY

Hiroshima Mathematical Journal

Hiroshima Mathematical Journal is a continuation of Journal of Science of the Hiroshima University, Series A, Vol. 1~Vol. 24 (1930~1960) and Journal of Science of the Hiroshima University, Series A-I, Vol. 25~34 (1961~1970).

Starting with Volume 4 (1974), each volume of Hiroshima Mathematical Journal consists of three numbers annually. This journal publishes original papers in pure and applied mathematics.

Printed by
Letterpress Co., LTD.
Hiroshima, Japan

Instructions for Authors

1. Manuscripts should be written in English and should contain
   (i) title
   (ii) name(s) of author(s)
   (iii) abstract
   (iv) 2000 Mathematics Subject Classification Numbers, and key words and phrases
   (v) body of the paper
   (vi) references
   (vii) affiliation(s), address(es) and e-mail address(es)

   in this order. For symbols and style conventions, authors should consult current issues of the journal. Color printing may be accepted with some possible charge.

2. Manuscripts should be submitted in duplicate to the HMJ office. Attached should be a separated sheet containing
   (a) the title of the paper
   (b) the mailing address (and an e-mail address) of the author who is responsible for proof-readings
   (c) the running title (condensed title of less than 30 characters).

   The manuscript will not usually be returned to the author.

   It is preferred that manuscripts be prepared using the LaTeX2e style file of HMJ, which is available from the HMJ webpage, with no special macros. Then it is only necessary for the author to submit a LaTeX source file together with a pdf file (or a dvi file) and (a), (b) and (c) to the HMJ office by e-mail. If we have a trouble in handling the files, then the author may be asked to send a printed manuscript as well.

   The LaTeX style file of HMJ, its documentation, and a sample tex file can be obtained from the HMJ webpage.

3. When the manuscript is accepted for publication, the author will be asked for the LaTeX source file and the pdf file (the dvi file) which must be identical to that of the final version of the manuscript.

4. The pdf files of papers published in the journal will be offered to the public without charge on the HMJ webpage. The author will be asked to give consent for the journal to publish electronically as well as in print. Authors reserve the right to post their papers on the authors' homepages.

5. Authors of papers published in the journal will have a total of 50 offprints for papers without charge.

6. The address and the e-mail address of the HMJ office are:

   Hiroshima Mathematical Journal
   Department of Mathematics
   Graduate School of Science
   Hiroshima University
   Higashi-Hiroshima 739-8526 Japan

   Tel: +81–82–424–7350
   Fax: +81–82–424–0710
   E-mail: hmj@math.sci.hiroshima-u.ac.jp
   HMJ webpage: http://www.math.sci.hiroshima-u.ac.jp/hmj/index.html

HIROSHIMA MATH. J.
42–2 (JUL. 2012), 143–291

ISSN 0018–2079

CONTENTS