

ISSN 0027-7630

**NAGOYA
MATHEMATICAL JOURNAL**

VOL. 79

October 1980

**PUBLISHED BY
DEPARTMENT OF MATHEMATICS, FACULTY OF SCIENCE
NAGOYA UNIVERSITY**

Correspondences concerning subscription, and back issues
of the journal should be addressed to

KINOKUNIYA BOOK-STORE CO., LTD.
17-7 Shinjuku 3-chome, Shinjuku-ku
TOKYO 160-91 JAPAN

or

KINOKUNIYA BOOK STORES
OF AMERICA CO., LTD.
West Bldg., Japanese Cultural and
Trade Center
1581 Webster St.,
San Francisco, CALIFORNIA 94115,
U.S.A.

The annual subscription price for 1980 is about \$ 90.00

ISSN 0027-7630

NAGOYA
MATHEMATICAL JOURNAL

VOL. 79

October 1980

Edited by

KAZUHIKO AOMOTO, TAKEYUKI HIDA, NOBORU ITO, TOMIO KUBOTA
(Managing Editor), HIDEYUKI MATSUMURA, HISASI MORIKAWA,
AKIHIKO MORIMOTO, KATUZI ONO, YOSHIHIRO SHIKATA,
KÔSAKU YOSIDA

PUBLISHED BY
DEPARTMENT OF MATHEMATICS, FACULTY OF SCIENCE
NAGOYA UNIVERSITY

Nagoya Mathematical Journal is, in principle, the official organ of the Department of Mathematics, Nagoya University, designed solely for the publication of research papers. However, some invited papers and other original papers in mathematics from all over the world are also regularly published in Nagoya Mathematical Journal. Currently, 4 volumes are published each year.

All manuscripts should be typewritten in English, French, or German with sufficient space between lines, and special letters such as bold-face, German, Greek, and script should be clearly marked. All single letters used in formulas will appear in italic, and mathematical symbols will appear in the standard style usual for mathematical literature. Therefore, it is not required to mark such letters and symbols. Instructions which conflict with the general printing rules of the journal will not be accepted. For example, each paragraph title should appear in bold-face. Good reproductions of a typewritten manuscript are acceptable.

As soon as we receive a manuscript, a receipt will be sent to the author. When a manuscript has been sent to a referee, the author will receive another notice. These receipts and notices, however, do not mean anything regarding the acceptability of the paper for publication. If the editorial committee has decided to accept a paper, the author will receive a notice containing the number of the volume in which the paper will appear.

Each author, as well as each co-author, will have 100 reprints, while only one set of proof will be prepared per paper for proof-reading by the author(s). Therefore, a joint paper must carry instructions as to whom the proof should be sent. Attached to the proof, an order form will be sent to the author for the additional reprints which are available at approximately 3¢ per page.

The actual business of the Nagoya Mathematical Journal is performed by the managing editor with the cooperation of editors residing in Nagoya.

The manuscript and general correspondence should be addressed to: Managing editor, Nagoya Mathematical Journal, Department of Mathematics, Faculty of Science, Nagoya University, Chikusa-ku, Nagoya, 464, Japan.

CONTENTS

Koike, T.: On the nonwandering sets on diffeomorphisms of surfaces	1
Itatsu, S. and Kaneta, H.: Spectral properties of first order ordinary differential operators with short range potentials	23
Sawada, K.: Extended f -orbits are approximated by orbits	33
Umemura, H.: Sur les sous-groupes algébriques primitifs du groupe de Cremona à trois variables	47
Haas, R. K. and Uehara, H.: A note on Thom classes in general cohomology	69
Furuta, Y.: A prime decomposition symbol for a non-abelian central extension which is abelian over a bicyclic biquadratic field	79
Kojima, H.: Cusp forms of weight $3/2$	111
Kutsuna, M.: On a criterion for the class number of a quadratic number field to be one	123
Ono, T.: On the group of automorphisms of a Hopf map	131
Chahal, J. S.: Solution of the congruence subgroup problem for solvable algebraic groups	141
Yano, K.: Topologically stable homeomorphisms of the circle	145
Sekiguchi, J.: Eigenspaces of the Laplace-Beltrami operator on a hyperboloid	151
Endo, S. and Miyata, T.: Corrigenda “On a classification of the function fields of algebraic tori” (Vol. 56 (1975), 85–104)	187