

ISSN 0027-7630

NAGOYA
MATHEMATICAL JOURNAL

VOL. 147

September 1997

PUBLISHED BY
GRADUATE SCHOOL OF POLYMATHEMATICS
NAGOYA UNIVERSITY

*This journal was typeset by L^AT_EX, with style files 'nmj.sty'
written by Dr. Masashi Kubo.*

T_EX is a trademark of American Mathematical Society.

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

KINOKUNIYA COMPANY LTD.
17-7 Shinjuku 3-chome, Shinjuku-ku
Tokyo 163-91 JAPAN

The annual subscription price for 1997 is about \$293.00

Published by
KINOKUNIYA COMPANY LTD.
Tokyo, Japan

ISSN 0027-7630

NAGOYA
MATHEMATICAL JOURNAL

VOL. 147

September 1997

Editors

KAZUHIKO AOMOTO, YOSHIYUKI KITAOKA,
RYOICHI KOBAYASHI, SHIGERU MUKAI, TAKEO OHSAWA,
YOSHIHIRO SHIKATA (Managing Editor), AKIHIRO TSUCHIYA

Associate Editors

TADAHISA FUNAKI, TAKEYUKI HIDA, NOBORU ITO,
TOMIO KUBOTA, SHIGEFUMI MORI, HISASI MORIKAWA,
AKIHIKO MORIMOTO, KATUZI ONO, TOSHIKAZU SUNADA

PUBLISHED BY
GRADUATE SCHOOL OF POLYMATHEMATICS
NAGOYA UNIVERSITY

Nagoya Mathematical Journal is the official journal of the Graduate School of Polymathematics, Nagoya University, designed solely for the publication of research papers. However, 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. Papers should be prepared using $\text{T}_{\text{E}}\text{X}$ if possible, but only the printed hard copy should be submitted (2 copies). Authors submitting old-fashioned typescript are requested to clearly distinguish special symbols and letters such as bold-face, script, German and Greek letters. The editors may request the original $\text{T}_{\text{E}}\text{X}$ files of papers accepted for publication. The journal's $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ style file and its manual can be obtained from the following URL.

<http://www.math.nagoya-u.ac.jp/nmj/index.html>

Papers should include

- (a) a short abstract of the contents,
- (b) classification numbers at the foot of page 1 according to the 1991 Mathematics Subject Classification, to be found in the 1990 Annual Index of *Mathematical Reviews*,
- (c) the author's coordinates, including e-mail address and Fax numbers,
- (d) for papers with long titles, the author's choice of running head (not longer than 40 characters).

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.

Authors submitting a joint paper must provide instructions as to which author is responsible for proof-reading (only one set of proofs will be provided). Each author, as well as each co-author will have 100 reprints.

The manuscript and general correspondence should be addressed to: Managing editor, Nagoya Mathematical Journal, Graduate School of Polymathematics, Nagoya University, Chikusa-ku, Nagoya, 464-01, Japan.

CONTENTS

Chung D. M. and Ji U. C.: Transforms on white noise functionals with their applications to Cauchy problems	1
Tamura, H.: Semi-classical bounds on scattering cross sections in two dimensional magnetic fields	25
Cho, C.: A generalization of Kita and Noumi's vanishing theorems of cohomology groups of local system	63
Böcherer, S. and Schulze-Pillot, R.: Siegel modular forms and theta series attached to quaternion algebras II	71
Ohsawa, T.: On the stability of pseudoconvexity for certain covering spaces	107
Kawahara, Y.: The mixed Hodge structure on the fundamental group of the fiber type 2-arrangement	113
Fujii, A. and Kitaoka, Y.: On plain lattice points whose coordinates are reciprocals modulo a prime	137
Chang, D.-C. and Li, B.-Q.: Sobolev and Lipschitz estimates for weighted Bergman projections	147
Yoshida, K.: Cofiniteness of local cohomology modules for ideals of dimension one	179
de Cataldo, M. A. A.: The genus of curves on the three dimensional quadric	193

