## NAGOYA MATHEMATICAL JOURNAL

VOL. 152

December 1998

PUBLISHED BY
GRADUATE SCHOOL OF MATHEMATICS
NAGOYA UNIVERSITY

This journal was typeset by LAT<sub>E</sub>X, with style files 'nmj.sty' written by Dr. Masashi Kubo.
TEX 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 163-8636 JAPAN

The annual subscription price for 1998 is about \$226.00

Honorary Editors
Takeyuki Hida, Noboru Ito, Tomio Kubota,
Hisasi Morikawa, Akihiko Morimoto, Katuzi Ono,
Yoshihiro Shikata

Published by KINOKUNIYA COMPANY LTD. Tokyo, Japan

# NAGOYA MATHEMATICAL JOURNAL

VOL. 152

December 1998

#### **Editors**

KAZUHIKO AOMOTO, YOSHIYUKI KITAOKA (Managing Editor), AKIHIKO GYOJA, RYOICHI KOBAYASHI, SHIGERU MUKAI, TAKEO OHSAWA, HIROFUMI OSADA, AKIHIRO TSUCHIYA

#### Associate Editors

TADAHISA FUNAKI, HIROSHI ITO, MASAHIKO KANAI,
MASATAKE MIYAKE, SHIGEFUMI MORI, YUKIHIKO NAMIKAWA,
HAJIME SATO, MASAHIRO SHIOTA, TOSHIKAZU SUNADA,
HIROSHI UMEMURA

PUBLISHED BY
GRADUATE SCHOOL OF MATHEMATICS
NAGOYA UNIVERSITY

Nagoya Mathematical Journal is the official journal of the Graduate School of Mathematics, 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 TEX 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 TEX files of papers accepted for publication. The journal's LATEX 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 Mathematics, Nagoya University, Chikusa-ku, Nagoya, 464-8602, Japan.

### CONTENTS

Tomisaki, M. and Yamazato, M.: Limit theorems for hitting times of 1-dimensional generalized diffusions	1
Yoshino, Y.: Tensor products of matrix factorizations	39
Murase, A. and Sugano, T.: On standard L-functions attached to automorphic forms on definite orthogonal groups	57
Cho, S.: Extension of CR structures on three dimensional pseudo- convex CR manifolds	97
Fujimoto, H.: Uniqueness problem with truncated multiplicities in value distribution theory	131
Nagel, U. and Schenzel, P.: Degree bounds for generators of cohomology modules and Castelnuovo-Mumford regularity	153
Okabe, Y. and Yamane, T.: The theory of KM <sub>2</sub> O-Langevin equations and its applications to data analysis (III): Deterministic analysis	175
Mendes Lopes, M. and Pardini, R.: Irregular canonical double surfaces	203