NAGOYA MATHEMATICAL JOURNAL

VOL. 133

March 1994

PUBLISHED BY
DEPARTMENT OF MATHEMATICS, SCHOOL OF SCIENCE
NAGOYA UNIVERSITY

Correspondences 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 1994 is about \$339.00

 $\begin{array}{c} {\rm Published\ by} \\ {\rm KINOKUNIYA\ COMPANY\ LTD.} \\ {\rm Tokyo,\ Japan} \end{array}$

NAGOYA MATHEMATICAL JOURNAL

VOL. 133

March 1994

Edited by

KAZUHIKO AOMOTO, TADAHISA FUNAKI, TAKEYUKI HIDA, NOBORU ITO,
YOSHIYUKI KITAOKA, TOMIO KUBOTA, HIDEYUKI MATSUMURA,
SHIGEFUMI MORI, HISASI MORIKAWA, AKIHIKO MORIMOTO,
SHIGERU MUKAI, TAKEO OHSAWA, KATUZI ONO,
YOSHIHIRO SHIKATA (Managing Editor),
TOSHIKAZU SUNADA, AKIHIRO TSUCHIYA

PUBLISHED BY
DEPARTMENT OF MATHEMATICS, SCHOOL 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.

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, School of Science, Nagoya University, Chikusa-ku, Nagoya, 464–01, Japan.

CONTENTS

Hiroshi Umemura: On a class of numbers generated by differential equations related with algebraic groups	1
Sam Huckaba and Thomas Marley: Depth formulas for certain graded rings associated to an ideal	57
Riccardo Salvati Manni: On the projective varieties associated with some subrings of the ring of Thetanullwerte	71
Mitsuru Nakai: Existence of Dirichlet finite harmonic measures on Euclidean balls	85
Yoshiyuki Kitaoka: The minimum and the primitive representation of positive definite quadratic forms	127
Nguyen Van Thu: Generalized independent increments processes	155
Paul Feit: Explicit formulas for local factors: Addenda and errata	177