

*Pacific
Journal of
Mathematics*

Vol. 176, No. 2

December 1996

PACIFIC JOURNAL OF MATHEMATICS

Founded in 1951 by

E. F. Beckenbach (1906-1982) F. Wolf (1904-1989)

EDITORS

Sun-Yung A. Chang (Managing Editor)
University of California
Los Angeles, CA 90095-1555
pacific@math.ucla.edu

F. Michael Christ
University of California
Los Angeles, CA 90095-1555
christ@math.ucla.edu

Nicholas Ercolani
University of Arizona
Tucson, AZ 85721
ercolani@math.arizona.edu

Robert Finn
Stanford University
Stanford, CA 94305
finn@gauss.stanford.edu

Steven Kerckhoff
Stanford University
Stanford, CA 94305
spk@gauss.stanford.edu

Martin Scharlemann
University of California
Santa Barbara, CA 93106
mgscharl@math.ucsb.edu

Gang Tian
Massachusetts Institute of Technology
Cambridge, MA 02139
tian@math.mit.edu

V. S. Varadarajan
University of California
Los Angeles, CA 90095-1555
vsv@math.ucla.edu

Dan Voiculescu
University of California
Berkeley, CA 94720
dvv@math.berkeley.edu

SUPPORTING INSTITUTIONS

ACADEMIA SINICA, TAIPEI
CALIF. INST. OF TECHNOLOGY
CHINESE UNIV. OF HONG KONG
HONG KONG UNIV. OF SCI. & TECH.
KEIO UNIVERSITY
MACQUARIE UNIVERSITY
MATH. SCI. RESEARCH INSTITUTE
NEW MEXICO STATE UNIV.
OREGON STATE UNIV.
PEKING UNIVERSITY
RITSUMEIKAN UNIVERSITY
STANFORD UNIVERSITY

TOKYO INSTITUTE OF TECHNOLOGY
UNIVERSIDAD DE LOS ANDES
UNIV. OF ARIZONA
UNIV. OF BRITISH COLUMBIA
UNIV. OF CALIF., BERKELEY
UNIV. OF CALIF., DAVIS
UNIV. OF CALIF., IRVINE
UNIV. OF CALIF., LOS ANGELES
UNIV. OF CALIF., RIVERSIDE
UNIV. OF CALIF., SAN DIEGO
UNIV. OF CALIF., SANTA BARBARA

UNIV. OF CALIF., SANTA CRUZ
UNIV. OF HAWAII
UNIV. OF MELBOURNE
UNIV. OF MONTANA
UNIV. NACIONAL AUTONOMA DE MEXICO
UNIV. OF NEVADA, RENO
UNIV. OF OREGON
UNIV. OF SOUTHERN CALIFORNIA
UNIV. OF UTAH
UNIV. OF WASHINGTON
WASHINGTON STATE UNIVERSITY

The supporting Institutions listed above contribute to the cost of publication of this Journal, but they are not owners or publishers and have no responsibility for its contents or policies.

Manuscripts must be prepared in accordance with the instructions provided on the inside back cover.

The table of contents and the abstracts of the papers in the current issue, as well as other information about the Pacific Journal of Mathematics, may be found on the Internet at <http://www.math.uci.edu/pjm.html>.

The *Pacific Journal of Mathematics* (ISSN 0030-8730) is published monthly except for July and August. Regular subscription rate: \$245.00 a year (10 issues). Special rate: \$123.00 a year to individual members of supporting institutions.

Subscriptions, back issues published within the last three years and changes of subscribers address should be sent to Pacific Journal of Mathematics, P.O. Box 4163, Berkeley, CA 94704-0163, U.S.A. Prior back issues are obtainable from Kraus Periodicals Co., Route 100, Millwood, NY 10546.

The Pacific Journal of Mathematics at the University of California, c/o Department of Mathematics, 981 Evans Hall, Berkeley, CA 94720 (ISSN 0030-8730) is published monthly except for July and August. Second-class postage paid at Berkeley, CA 94704, and additional mailing offices. POSTMASTER: send address changes to Pacific Journal of Mathematics, P.O. Box 6143, Berkeley, CA 94704-0163.

PUBLISHED BY PACIFIC JOURNAL OF MATHEMATICS at University of California,
Berkeley, CA 94720, A NON-PROFIT CORPORATION

This publication was typeset using AMS-LATEX,
the American Mathematical Society's TEX macro system.
Copyright © 1995 by Pacific Journal of Mathematics