

CODEN IJMTAW  
VOLUME 23  
NUMBER 2

PAGES 175-343  
JUNE 1979  
ISSUE 91

*ILLINOIS  
JOURNAL  
OF  
MATHEMATICS*

.....

*a quarterly journal published by the*  
UNIVERSITY OF ILLINOIS, URBANA

.....

*edited by*

FELIX ALBRECHT  
LOUIS AUSLANDER  
IRVING REINER  
LEE A. RUBEL  
HAROLD M. STARK  
DANIEL W. STROOCK

# ILLINOIS JOURNAL OF MATHEMATICS

## Manuscripts

Original research papers in pure and applied mathematics intended for publication in this journal may be written in English, French, German, or Italian. They should be addressed to the Illinois Journal of Mathematics, University of Illinois, Urbana, Illinois 61801, or to one of the editors:

FELIX ALBRECHT, Department of Mathematics, University of Illinois, Urbana, Illinois 61801.

LOUIS AUSLANDER, Department of Mathematics, Graduate School and University Center, City University of New York, New York, N.Y. 10036.

IRVING REINER, Department of Mathematics, University of Illinois, Urbana, Illinois 61801.

LEE A. RUBEL, Department of Mathematics, University of Illinois, Urbana, Illinois 61801.

HAROLD M. STARK, Department of Mathematics 2-236, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139.

DANIEL W. STROOCK, Department of Mathematics, University of Colorado, Boulder, Colorado 80302.

All papers should be typewritten, double spaced, and the author should keep a complete copy. Bibliography and footnotes should be typed, double-spaced, on separate sheets of paper. Figures should be drawn separately in black ink on white paper suitable for being photographed and reduced (lettering included) to half size.

## Proof

Authors will receive only galley proof. Proof sent to North American addresses will be accompanied by manuscript and sent by first class mail. To other addresses, proof will be sent by airmail, and manuscript will be sent only if requested. Authors are asked to return proof (and manuscript if sent) by the same class of mail that was used in sending it to them.

## Page charges

To cover a part of the cost of production, the author's institution will be billed for \$40 per page.

## Reprints

One hundred free reprints are supplied to the sole author of a paper: fifty free reprints are supplied to each author of a joint paper. Additional reprints may be purchased.

The ILLINOIS JOURNAL OF MATHEMATICS (0019-2082) is published quarterly by the University of Illinois. Entered as second-class matter June 4, 1957, at the post office at Urbana, Illinois, under the act of August 24, 1912. Office of publication, University of Illinois Press, 54 E. Gregory Drive, Box 5081, Station A, Champaign, Illinois, 61820.

© 1979 by the Board of Trustees of the University of Illinois  
Manufactured in the United States of America