ILLINOIS JOURNAL OF MATHEMATICS

a quarterly journal published by the

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

edited by

KUO-TSAI CHEN MAHLON M. DAY

FRANK B. KNIGHT

DAVID MASSER IRVING REINER

KAREN UHLENBECK

ILLINOIS JOURNAL OF MATHEMATICS

Manuscript

Original research papers in pure and applied mathematics intended for publication in this journal may be written in English, French or German. They should be addressed to the Illinois Journal of Mathematics, 1409 West Green Street, University of Illinois at Urbana-Champaign, Illinois 61901, or one of the editors:

Kuo-Tsai Chen, University of Illinois, Department of Mathematics, 273 Altgeld Hall, 1409 West Green St., Urbana, Illinois 61801.

MAHLON M. DAY (Managing Editor), University of Illinois, Department of Mathematics, 273 Altgeld Hall, 1409 West Green St., Urbana, Illinois 61801.

Frank B. Knight, University of Illinois, Department of Mathematics, 273 Altgeld Hall, 1409 West Green St., Urbana, Illinois 61801.

DAVID MASSER, The University of Michigan, Department of Mathematics, 3220 Angell Hall, Ann Arbor, Michigan 48109–1003.

IRVING REINER, University of Illinois, Department of Mathematics, 273 Altgeld Hall, 1409 West Green St., Urbana, Illinois 61801.

KAREN UHLENBECK, University of Chicago, Department of Mathematics, 5734 University Ave., Chicago, Illinois 60637.

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.

Proof

Authors will receive only galley proof. Proof sent to North American addresses will be accompanied by manuscript and set 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 offprints are supplied to the sole author of a paper; fifty free offprints are supplied to each author of a joint paper. Additional offprints may be purchased.

THE ILLINOIS JOURNAL OF MATHEMATICS (ISSN 0010-2082) is published quarterly (Spring, Summer, Fall, Winter) by the University of Illinois Press. Second-class postage paid at Champaign, Illinois and additional mailing offices. *Postmaster:* Please send change of address to University of Illinois Press, 54 E. Gregory Drive, Champaign, Illinois 61820.