## Submitting manuscripts

Original research papers in pure and applied mathematics intended for publication in this journal may be written in English, French or German. The submission of a paper implies the author's assurance that it has not been published or submitted for publication elsewhere.

Submit two copies of your manuscript, double spaced, to the Illinois Journal of Mathematics, 1409 West Green St., University of Illinois, Urbana, Illinois 61801 (ijm@math.uiuc.edu) or directly to one of the editors listed on the inside front cover.

Include your e-mail address with your covering letter.

## Sending electronic files

Once your paper is accepted you will be given instructions for sending your electronic file, to be used in the typesetting process. But do not send any electronic files until then. We prefer a version of  $T_EX$  but can use any electronic files, including ChiWriter,  $T^3$ , WordPerfect and Microsoft Word.

#### 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.

### **Offprints**

One hundred 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.

Vol. 40, No. 2

# CONTENTS

Summer 1996

	Page
Geometric embeddings of operator spaces By HORACIO PORTA and LÁZARO RECHT	151
Coanalytic families of norms on a separable Banach space By BENOÎT BOSSARD	162
Meager-nowhere dense games (VI): Markov k-tactics By MARION SCHEEPERS	182
Riemannian submersions which preserve the eigenforms of the Laplacian	
By P. B. GILKEY and J. H. PARK	194
Extremal functions in invariant subspaces of Bergman spaces By PETER DUREN, DMITRY KHAVINSON and HAROLD S. SHAPIRO	202
Jacobi fields, Riccati equation and Riemannian foliations By PHILIPPE TONDEUR and LIEVEN VANHECKE	211
On the Bergman invariant and curvatures of the Bergman metric By STEVEN G. KRANTZ and JIYE YU	226
The prime element theorem in additive arithmetic semigroups. I By WEN-BIN ZHANG	245
Energy minimizing sections of a fiber bundle By SHIAH-SEN WANG	281
On counterexamples to Keller's problem By RONEN PERETZ	293
Weierstrass loci for vector bundles on curves By E. BALLICO	304
A tight closure approach to arithmetic Macaulayfication By IAN M. ABERBACH, CRAIG HUNEKE and KAREN E. SMITH	310
Finiteness of $\bigcup_e \operatorname{Ass} F^e(M)$ and its connections to tight closure By MORDECHAI KATZMAN	330
On a conductor discriminant formula of McCulloh By BART DE SMIT	338
Transference of multilinear operators By LOUKAS GRAFAKOS and GUIDO WEISS	344

Published by the University of Illinois Press on behalf of the Department of Mathematics of the University of Illinois in Spring, Summer, Fall, and Winter. Supported in part by the George A. Miller Endowment.