TABLE OF CONTENTS

ARTICLES

Models of second-order Zermelo set theory, by GABRIEL UZQUIANO 289
Between Russell and Hilbert: Behmann on the foundations of mathematics, by PAOLO MANCOSU 303
Completeness before Post: Bernays, Hilbert, and the development of propositional logic, by RICHARD ZACH 331

COMMUNICATIONS

Accessible recursive functions, by STANLEY S. WAINER 367

In memoriam: Albert G. Dragalin, 1941–1998, by S. ARTEMOV, B. KUSHNER, G. MINTS, E. NOGINA and A. TROELSTRA 389
In memoriam: Nelson Goodman, 1906–1998, by JOSEPH S. ULLIAN 392

ASL Annual Meeting, San Diego, California, March 20–23, 1999..... 395
WoLLIC '98, 5th workshop on logic, language, information and computation, Sao Paulo, Brazil, July 28–31, 1998 422
WoLLIC '99, 6th workshop on logic, language, information and computation, Rio de Janeiro, Brazil, May 25–28, 1999..... 424
Notices..... 426
Lecture Notes in Logic..... 431

THE BULLETIN OF SYMBOLIC LOGIC (ISSN 1079-8986) is published quarterly, in the months of March, June, September, and December, by the Association for Symbolic Logic, Inc. at 1325 South Oak Street, Champaign, IL 61820-6903, USA. Second class postage is paid at Champaign, IL and additional offices. The BULLETIN is distributed with THE JOURNAL OF SYMBOLIC LOGIC; the 1999 annual subscription price for the two journals is $340. Postmaster: Send address changes to ***The Bulletin of Symbolic Logic, Journals Division UIP, 1325 South Oak Street, Champaign, IL 61820-6903, USA.*** Business correspondence should be sent to the Secretary-Treasurer of the Association, C. Ward Henson (address on inside back cover).

The BULLETIN and the JOURNAL are the official organs of the Association for Symbolic Logic, an international organization for furthering research in symbolic logic and the exchange of ideas among mathematicians, philosophers, computer scientists, linguists, and others interested in this field.

The BULLETIN invites submission of *Articles* and *Communications*. *Articles* should be expository or survey papers of broad interest that are accessible to a wide audience of logicians. They may deal with any areas of logic including mathematical or philosophical logic, logic in computer science or linguistics, the history or philosophy of logic, and applications of logic to other fields. *Communications* should be announcements of important new results and ideas in any aspect of logic; they may be short papers in their final form or preliminary announcements (extended abstracts, position papers) of longer, full papers that will be published elsewhere. In any case, they should include, in addition to a description of the new results or ideas, enough history, background, and explanation to make the significance of the work apparent to a wide audience. *Communications* will be quickly refereed and published within six months of the submission of final versions.

Continued on inside back cover

10 9 8 7 6 5 4 3 2 1 04 03 02 01 00 99

Articles should be submitted to ***Andreas R. Blass, Department of Mathematics, University of Michigan, Ann Arbor, MI 48109, USA*** (ablass@umich.edu). *Communications* may be submitted to any of the other editors: ***John P. Burgess, Department of Philosophy, Princeton University, Princeton, NJ 08544, USA*** (jburgess@pucc.princeton.edu); or ***Alexander S. Kechris, Department of Mathematics, Caltech, Pasadena, CA 91125, USA*** (kechris@caltech.edu); or ***H. Dugald Macpherson, Department of Pure Mathematics, University of Leeds, Leeds LS2 9JT, England*** (pmthdm@amsta.leeds.ac.uk); or ***Philip J. Scott, Department of Mathematics, University of Ottawa, 585 King Edward, Ottawa, Ontario, Canada K1N 6N5*** (phil@csi.uottawa.ca); or ***Richard A. Shore*** (Managing Editor), ***Department of Mathematics, White Hall, Cornell University, Ithaca, NY 14853, USA*** (shore@math.cornell.edu).

Two copies of the manuscript should be sent to the editor, and the author should also keep a complete copy. After the paper is accepted in its final form, an electronic copy in LaTeX or (preferably) $\mathcal{A}\mathcal{M}\mathcal{S}$-LaTeX format will be appreciated, and will advance considerably the final publication date of the paper. Fifty offprints of each article published are supplied at no charge and additional offprints may be purchased if desired.

Postscript files of articles published in the BULLETIN may be downloaded using a Web browser at http://www.math.ucla.edu/∼asl. A link to this database may also be found at the ASL Website, at http://www.aslonline.org.

Individual membership in the Association is open to anyone interested in its work. Annual dues for members are $56 ($28 for students). Dues include subscriptions to the current volumes of the JOURNAL and the BULLETIN. Institutional membership in the Association is available to any academic institution or department. Annual institutional dues are $500 for 1999. Membership privileges include choices of current subscriptions, back volumes, and student memberships. A detailed description of institutional and corporate memberships is available from the Secretary-Treasurer.

Requests for information, applications for membership, orders for back volumes, business correspondence, and notices and announcements for publication in the BULLETIN should be sent to the Secretary-Treasurer of the Association, ***C. Ward Henson, ASL, Department of Mathematics, University of Illinois, 1409 W. Green Street, Urbana, IL 61801, USA.*** The electronic mail address of the Association's business office is asl@math.uiuc.edu.

Notices of change of address, dues payments, and subscription orders to the JOURNAL and BULLETIN should be sent to the ***Association for Symbolic Logic, Journals Division UIP, 1325 South Oak Street, Champaign, IL 61820-6903, USA.*** All orders must be accompanied by payment in US dollars; Visa and MasterCard charges are accepted. To receive a replacement copy of the BULLETIN please report damaged, defective, or missing issues within nine months of the date of publication.

All back volumes of the BULLETIN are available. Members of the Association may purchase back volumes for their personal use at a 50% discount. This discount also applies to institutional members. Orders should be sent to the Secretary-Treasurer, from whom the current price list is available.

This BULLETIN has been registered with the Copyright Clearance Center, Inc. The appearance of a code at the bottom of the first page of an article indicates the copyright owner's consent for copying beyond that permitted by Sections 107 or 108 of the US Copyright Law, provided that the per-copy fee stated in the code is paid directly to ***Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA.*** This consent does not extend to copying for general distribution, for advertising or promotion purposes, for creating new collective works, or for resale. Specific written permission for such copying must be obtained from the Association.