

THE JOURNAL OF SYMBOLIC LOGIC

EDITED BY

JON BARWISE

STEPHEN A. COOK

MICHAEL DUNN

HERBERT B. ENDERTON

KIT FINE

WILLIAM A. HOWARD

WILFRID HODGES

AKIHIRO KANAMORI

ALEXANDER KECHRIS

ANGUS MACINTYRE

MICHAEL MAKKAJ

RICHARD A. SHORE

A. S. TROELSTRA

BAS VAN FRAASSEN

Consulting Editors:

PETER ACZEL

JAMES BAUMGARTNER

JIRÍ BEČVÁŘ

GEORGE BOLOS

JOAN BRESNAN

JOHN P. BURGESS

GREGORY L. CHERLIN

M. J. CRESSWELL

FREDERIC B. FITCH

SY D. FRIEDMAN

HANS KAMP

SAUL A. KRIPKE

MENACHEM MAGIDOR

GREGORY MINC

J. DONALD MONK

CHARLES D. PARSONS

GABRIEL SABBAGH

DANA S. SCOTT

STEVEN K. THOMASON

ALASDAIR URQUHART

JOHAN VAN BENTHEM

VOLUME 50 • NUMBER 4 • DECEMBER 1985

ISSN 0022-4812

PUBLISHED QUARTERLY BY THE ASSOCIATION FOR SYMBOLIC LOGIC, INC. WITH
SUPPORT FROM ICSU AND FROM INSTITUTIONAL AND CORPORATE MEMBERS

*Copyright © 1986 by the Association for Symbolic Logic, Inc. All rights reserved.
Reproduction by photostat, photo-print, microfilm, or like process by permission only.*

TABLE OF CONTENTS

On the number of generators of cylindric algebras. By H. ANDRÉKA and I. NÉMETI	865
Some results concerning strongly compact cardinals. By YOSHIHIRO ABE.....	874
Nonsplitting subset of $\mathcal{P}_\kappa(\kappa^+)$. By MOTI GITIK.....	881
Epistemic set theory is a conservative extension of intuitionistic set theory. By R. C. FLAGG	895
The completeness of a predicate-functor logic. By JOHN BACON.....	903
Answer to a problem raised by J. Robinson: The arithmetic of positive or negative integers is definable from successor and divisibility. By DENIS RICHARD...	927
The \triangleleft -ordering on normal ultrafilters. By STEWART BALDWIN	936
Polynomial rings and weak second-order logic. By ANNE BAUVAL.....	953
Why some people are excited by Vaught's conjecture. By DANIEL LASCAR.....	973
On minimal pairs of enumeration degrees. By KEVIN MCEVOY and S. BARRY COOPER.....	983
A guide to "Coding the universe" by Beller, Jensen, Welch. By SY D. FRIEDMAN	1002
A note on nonmultidimensional superstable theories. By ANAND PILLAY and CHARLES STEINHORN.....	1020
The ideal structure of existentially closed algebras. By PAUL C. EKLOF and HANS-CHRISTIAN MEZ	1025
The geometry of weakly minimal types. By STEVEN BUECHLER	1044
The ideal structure of existentially closed algebras. By PAUL C. EKLOF and HANS-CHRISTIAN MEZ	1025
The geometry of weakly minimal types. By STEVEN BUECHLER	1044
One theorem of Zil'ber's on strongly minimal sets. By STEVEN BUECHLER	1054
An algorithm to determine, for any prime p , a polynomial-sized formula which expresses "The cardinality is not p ". By SAURO TULLI	1062
Reviews.....	1065
Meeting of the Association for Symbolic Logic, Anaheim, 1985	1094
List of officers and members of the Association for Symbolic Logic	1103
Index of Reviews	1142
Notices.....	1151

THE JOURNAL OF SYMBOLIC LOGIC is published quarterly, in the months of March, June, September, and December, by the Association for Symbolic Logic, Inc., 2515 Wilshire Boulevard, Pasadena, CA 91107. Second class postage is paid at Pasadena, CA and additional mailing offices. The annual subscription price is \$65.00. Postmaster: Send address changes to *The Journal of Symbolic Logic*, Association for Symbolic Logic, P.O. Box 70557, Pasadena, CA 91107.

The JOURNAL is the official organ of the Association for Symbolic Logic, an international organization for furthering research in symbolic logic and exchange of ideas among mathematicians, philosophers, and others interested in this field.

Individual membership in the Association is open to anyone interested in symbolic logic. Annual dues for students are \$12.50. Dues for other individual members are \$65.00 and include subscription to the current volume of the JOURNAL. For their part, members may purchase back volumes at a discount.

Institutional membership in the Association is available to any academic department. Annual dues are \$160.00. Membership privileges include access to current subscriptions, of back volumes, and of student memberships; a detailed description of the Association. Information on corporate membership is also available from the Association.

For nonmembers, the current annual subscription price is \$65.00 for a paper volume in paper form, and \$87.00 for a combination of paper and microform (microfiche). A microfiche of each issue is sent by first class or air mail before the camera copy of the paper volume. Microfilm copy of a volume is sent at the end of the year.