THE

JOURNAL

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 Makkai Richard A. Shore A. S. Troelstra Bas van Fraassen

Consulting Editors:

James Baumgartner Jiří Bečvář George Boolos John P. Burgess Gregory L. Cherlin M, J, CRESSWELL FREDERIC B, FITCH MATTHEW FOREMAN SY D, FRIEDMAN SAUL A, KRIPKE GREGORY MINC J. DONALD MONK Gabriel Sabbagh Scott Soames Alasdair Urquhart Johan van Benthem

VOLUME 51 · NUMBER 3 · SEPTEMBER 1986

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

A saturation property of ideals and weakly compact cardinals. By JOJI	1
Таканазні	513
Small filter forcing. By R. MICHAEL CANJAR	526
Between strong and superstrong. By STEWART BALDWIN	547
On ideals of subsets of the plane and on Cohen reals. By JACEK CICHON and	
JANUSZ PAWLIKOWSKI	560
Attention à la marche! By BRUNO POIZAT	570
Completeness theorem for biprobability models. By MIODRAG D. RAŠKOVIĆ	586
Large cardinal structures below \aleph_{ω} . By ARTHUR W. APTER and JAMES M.	
HENLE	,591
$P_{\kappa}\lambda$ combinatorics II: The RK ordering beneath a supercompact measure. By	
WILLIAM S. ZWICKER	604
Distributive ideals and partition relations. By C. A. JOHNSON	617
On the proof theory of the intermediate logic MH. By JONATHAN P. SELDIN	626
On precipitousness of the nonstationary ideal over a supercompact. By MOTI	
GITIK	648
The truth is never simple. By JOHN P. BURGESS	663
Taking out LK parts from a proof in Peano arithmetic. By TSUYOSHI YUKAMI	682
Supercompact cardinals, trees of normal ultrafilters, and the partition property.	
By Julius B. Barbanel	701
Some remarks on definable equivalence relations in O-minimal structures. By	Ser
ANAND PILLAY	709
The independence relation in separably closed fields. By G. SROUR	715
Small decidable sheaves. By ANDREAS BLASS and ANDRE SCEDROV	726
Some elementary degree-theoretic reasons why structures need similarity types.	
By T. G. MCLAUGHLIN	732
Some properties of epistemic set theory with collection. By ANDRE SCEDROV	748
Stability theory for topological logic, with applications to topological modules.	2 -
By T. G. KUCERA	755
The degrees below a 1-generic degree < 0'. By Christine Ann Haught	770
A simple solution to Friedman's fourth problem. By XAVIER CAICEDO	778
Inverse topological systems and compactness in abstract model theory. By	DA
DANIELE MUNDICI	785
À l'ouest d'Éden. By BRUNO POIZAT	795
Reviews	817
Meeting of the Association for Symbolic Logic, Stanford, 1985	832
Notices	863

THE JOURNAL OF SYMBOLIC LOGIC is published quarterly, in the months of March, June, September, and December, by the Association for Symbolic Logic, Inc., at 1981 East Locust Street, Pasadena, CA 91107. Second class postage is paid at Pasadena, CA and additional offices. The annual subscription price is \$85.00. 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 its work. Annual dues for students are \$16.00. Dues for other individual members are \$32.00 per year. Dues include subscription to the current volume of the JOURNAL. For their personal use, members may purchase back volumes at a discount.

Continued on inside back cover