THE JOURNAL OF SYMBOLIC LOGIC

Edited by

Justin Moore, *Coordinating Editor* Alessandro Berarducci Erich Grädel Bradd Hart Denis Hirschfeldt Ralf Schindler Frank Stephan Alasdair Urquhart Andreas Weiermann

VOLUME 76 • NUMBER 1 • MARCH 2011 • ISSN 0022-4812

Copyright © 2011 by the Association for Symbolic Logic. All rights reserved. Reproduction by photostat, photo-print, microfilm, or like process by permission only.

151

PUBLISHED QUARTERLY BY THE ASSOCIATION FOR SYMBOLIC LOGIC WITH SUPPORT FROM INSTITUTIONAL MEMBERS.

https://doi.org/10.1017/S0022481200001948 Published online by Cambridge University Press

TABLE OF CONTENTS

Cardinal characteristics on graphs, by NICK HAVERKAMP	1
The club principle and the distributivity number, by HEIKE MILDENBERGER	34
A complicated ω -stable depth 2 theory, by MARTIN KOERWIEN	47
Computability of Fraïssé limits, by BARBARA F. CSIMA, VALENTINA S.	
HARIZANOV, RUSSELL MILLER, and ANTONIO MONTALBÁN	66
Double-exponential inseparability of Robinson subsystem Q_+ , by LAVINIA	
Egidi and Giovanni Faglia	94
Iterative differential Galois theory in positive characteristic: A model	
theoretic approach, by JAVIER MORENO	125
Weihrauch degrees, omniscience principles and weak computability, by	
VASCO BRATTKA and GUIDO GHERARDI	143
On the jump classes of noncuppable enumeration degrees, by CHARLES M.	
Harris	177
Mad families, splitting families and large continuum, by JÖRG BRENDLE	
and VERA FISCHER	198
Invariant measures on groups satisfying various chain conditions, by LOU	• • • •
VAN DEN DRIES and VINICIUS CIFÚ LOPES	209
On the generic type of the free group, by RIZOS SKLINOS	227
Euler characteristics for strongly minimal groups and the eq-expansions of	
vector spaces, by VINICIUS CIFÚ LOPES	235
Analytic equivalence relations and bi-embeddability, by SY-DAVID FRIEDMAN	
and LUCA MOTTO ROS	243
Coding true arithmetic in the Medvedev and Muchnik degrees, by PAUL	
Shafer	267
Benign cost functions and lowness properties, by NOAM GREENBERG	
and ANDRÉ NIES	289
On the non-confluence of cut-elimination, by MATTHIAS BAAZ and STEFAN	212
HETZL	313
A theorem on partial conservativity in arithmetic, by PER LINDSTRÖM	341
Stable division rings, by CÉDRIC MILLIET	348
Hindman's theorem: an ultrafilter argument in second order arithmetic, by	
Henry Towsner	353

THE JOURNAL OF SYMBOLIC LOGIC (ISSN print: 0022-4812, ISSN online: 1943-5886) is published quarterly, in the months of March, June, September, and December, by the Association for Symbolic Logic, Inc., 124 Raymond Avenue, Poughkeepsie, NY 12604-0001, USA. Periodicals postage is paid at Poughkeepsie NY and at additional mailing offices. The JOURNAL is distributed with THE BULLETIN OF SYMBOLIC LOGIC. The 2011 annual subscription price for the two journals, in either print or electronic form, is US\$610; visit http://www.aslonline.org/Journals-subscription.html for more information. Postmaster: Send address changes to *The Journal of Symbolic Logic, c/o American Mathematical Society, 201 Charles Street, Providence, RI 02904-2294, USA*. Business correspondence should be sent to the Secretary-Treasurer of the Association, Charles Steinhorn (address on inside back cover).

The BULLETIN, the JOURNAL, and the REVIEW OF SYMBOLIC LOGIC 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 JOURNAL invites submission of original scholarly work in mathematical logic and its applications.

Continued on inside back cover

10 9 8 7 6 5 4 3 2 1 16 15 14 13 12 11