

THE JOURNAL OF SYMBOLIC LOGIC

Edited by

Steve Awodey, *Coordinating Editor*

Sylvy Anscombe

Jeremy Avigad

Lev Beklemishev

Alex Berenstein

Ricardo Camerlo

Damir Dzhafarov

Vera Fischer

Itay Kaplan

Elvira Mayordomo

Hiroshi Sakai

Anton Setzer

VOLUME 90 • NUMBER 1 • MARCH 2025 • ISSN 0022-4812

Copyright © 2025 by the Association for Symbolic Logic. All rights reserved.
Reproduction by photostat, photo-print, microfilm, or like process by permission only.



PUBLISHED BY CAMBRIDGE UNIVERSITY PRESS FOR
AND ON BEHALF OF THE ASSOCIATION FOR SYMBOLIC LOGIC.

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 logic and the exchange of ideas among mathematicians, computer scientists, linguists, and others interested in this field.

The JOURNAL invites submission of original scholarly work in mathematical logic and its applications.

Editors

Steve Awodey (Coordinating Editor)

Departments of Philosophy and Mathematics, Carnegie Mellon University, 5000 Forbes Avenue,
Pittsburgh, PA 15213, USA
(awodey@cmu.edu) ;

Sylvy Anscombe

Université de Paris, France
(sylvy.anscombe@imj-prg.fr) ;

Jeremy Avigad

Departments of Philosophy and Mathematics, Carnegie Mellon University, 5000 Forbes Avenue,
Pittsburgh, PA 15213, USA
(avigad@cmu.edu) ;

Lev Beklemishev

Steklov Mathematical Institute of RAS, Gubkina str. 8, 119991 Moscow, Russia
(lbekl@yandex.ru) ;

Alex Berenstein

Departamento de Matemáticas, Universidad de los Andes, Cra 1 N° 18A-12, Edificio H,
111711 Bogotá, Colombia
(aberenst@uniandes.edu.co) ;

Ricardo Camerlo

Dipartimento di Matematica, Università di Genova, Via Dodecaneso, 35 16146 Genova, Italy
(camerlo@dima.unige.it) ;

Damir Dzhafarov

Department of Mathematics, University of Connecticut, 341 Mansfield Road U1009, Storrs,
CT 06269-1009, USA
(damir@math.uconn.edu) ;

Vera Fischer

University of Vienna, Kolingasse 14-16, 1090 Vienna, Austria
(vera.fischer@univie.ac.at) ;

Itay Kaplan

Einstein Institute of Mathematics, Office Ross 78B, Hebrew University (The Edmond J. Safra Campus –
Giv'at Ram), Jerusalem 91904, Israel
(kaplan@math.huji.ac.il) ;

Elvira Mayordomo

Departamento de Informática, Universidad de Zaragoza, María de Luna 1, 50018 Zaragoza, Spain
(elvira@unizar.es) ;

Hiroshi Sakai

Graduate School of System Informatics, Kobe University, 1-1 Rokkodai-cho, Nada-ku, Kobe,
657-8501, Japan
(hsakai@people.kobe-u.ac.jp) ;

Anton Setzer

Department of Computer Science, Swansea University Bay Campus, Fabian Way, Swansea, SA1 8EN, UK
(a.g.setzer@swansea.ac.uk) .

Manuscripts should be submitted using EditFlow at https://ef.msp.org/submit/asl_jsl, where instructions directed specifically at using the system can also be found.

Authors should keep a complete copy of their submission and all electronic files from which it was created. They should also consult the more general guidelines for the submission of manuscripts at <https://aslonline.org/journals/the-journal-of-symbolic-logic/submit-guide-lines/>. These instructions include the Association's standards about previous publication and plagiarism as well as information about copyrights and electronic copies of published papers.

No print offprints will be supplied but authors will receive a link to a freely accessible electronic pdf of their published article. Print offprints may be purchased if required.

TABLE OF CONTENTS

Iteration theorems for subversions of forcing classes GUNTER FUCHS and COREY BACAL SWITZER	1
A note on the non-existence of prime models of theories of pseudo-finite fields ZOÉ CHATZIDAKIS	52
Dimension and measure in pseudofinite H -structures ALEXANDER BERENSTEIN, DARÍO GARCÍA, and TINGXIANG ZOU.....	68
Coloring isosceles triangles in choiceless set theory YUXIN ZHOU	105
On proving consistency of equational theories in Bounded Arithmetic ARNOLD BECKMANN and YORIYUKI YAMAGATA	135
Weak heirs, coheirs, and the Ellis semigroups ADAM MALINOWSKI and LUDOMIR NEWELSKI.....	166
Computable topological groups HEER TERN KOH, ALEXANDER G. MELNIKOV, and KENG MENG NG.....	188
On equivalence relations induced by locally compact abelian Polish groups LONGYUN DING and YANG ZHENG	221
Cofinality quantifiers in abstract elementary classes and beyond WILL BONEY	237
The covering numbers of some Mycielski ideals may be different OTMAR SPINAS.....	252
A terminating intuitionistic calculus GIULIO FELLIN and SARA NEGRI.....	278
Suslin tree preservation and club isomorphisms JOHN KRUEGER	298
A topometric Effros theorem ITAÏ BEN YAACOV and JULIEN MELLERAY	310
Hybrid partial type theory MARÍA MANZANO, ANTONIA HUERTAS, PATRICK BLACKBURN, MANUEL MARTINS, and VÍCTOR ARANDA	321
On a conjecture regarding the mouse order for weasels JAN KRUSCHEWSKI and FARMER SCHLUTZENBERG	364
Semi-equational theories ARTEM CHERNIKOV and ALEX MENNEN	391
Discrete sets definable in strong expansions of ordered Abelian groups ALFRED DOLICH and JOHN GOODRICK	423
Abelian groups definable in p -adically closed fields WILL JOHNSON and NINGYUAN YAO.....	460