

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 2 • JUNE 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

A parameterized halting problem, Δ_0 truth and the MRDP theorem YIJIA CHEN, MORITZ MÜLLER, and KEITA YOKOYAMA.....	483
Finite undecidability in NIP fields BRIAN TYRRELL.....	509
Degree of satisfiability in Heyting algebras BENJAMIN MERLIN BUMPUS and ZOLTAN A. KOCSIS.....	533
Two examples concerning existential undecidability in fields PHILIP DITTMANN.....	552
First-order homotopical logic JOSEPH HELFER	564
Non-tightness in class theory and second-order arithmetic ALFREDO ROQUE FREIRE and KAMERYN J. WILLIAMS	627
Sufficient conditions for local tabularity of a polymodal logic ILYA B. SHAPIROVSKY	655
The group configuration theorem for generically stable types PAUL WANG.....	681
Structure of summable tall ideals under Katětov order JIALIANG HE, ZUOHENG LI, and SHUGUO ZHANG	725
The Weihrauch lattice at the level of Π^1_1 -CA ₀ : the Cantor–Bendixson theorem VITTORIO CIPRIANI, ALBERTO MARCONE, and MANLIO VALENTI.....	752
Invariant Keisler measures for ω -categorical structures PAOLO MARIMON.....	791
A Borel maximal cofinitary group HAIM HOROWITZ and SAHARON SHELAH.....	808
More on blurry HOD GUNTER FUCHS	822
A Lopez-Escobar theorem for continuous domains NIKOLAY BAZHENOV, EKATERINA FOKINA, DINO ROSSEGGER, ALEXANDRA SOSKOVA, and STEFAN VATEV	854
Undecidability of multiplication in Presburger arithmetic with sets of powers CHRIS SCHULZ.....	872
A classification of the Wadge hierarchies on zero-dimensional polish spaces RAPHAËL CARROY, LUCA MOTTO ROS, and SALVATORE SCAMPERTI	887
Maximal stable quotients of invariant types in NIP theories KRZYSZTOF KRUPIŃSKI and ADRIÁN PORTILLO.....	918