

BULLETIN OF SYMBOLIC LOGIC

ISSN: 1079-8986
CAMBRIDGE UNIV PRESS
EDINBURGH BLDG, SHAFTESBURY RD, CB2 8RU CAMBRIDGE, ENGLAND
ENGLAND

[Go to Journal Table of Contents](#) [Go to Ulrich's](#)

Titles
ISO: Bull. Symb. Log.
JCR Abbrev: B SYMB LOG

Categories
[MATHEMATICS - SCIE;](#)
[LOGIC - SCIE;](#)

Languages
ENGLISH

4 Issues/Year;

Key Indicators

Year	Total Cites Graph	Journal Impact Factor Graph	Impact Factor Without Journal Self Cites Graph	5 Year Impact Factor Graph	Immediacy Index Graph	Citable Items Graph	Cited Half-Life Graph	Citing Half-Life Graph	Eigenfactor Score Graph	Article Influence Score Graph	% Articles in Citable Items Graph	Normalized Eigenfactor Graph	Average JIF Percentile Graph
2015	281	0.593	0.444	1.079	0.125	16	>10.0	>10.0	0.00141	1.479	100.00	0.16064	60.337
2014	197	0.720	0.560	0.644	0	15	>10.0	>10.0	0.00094	1.002	100.00	0.10517	74.599
2013	182	0.917	0.917	0.848	0.083	12	9.1	>10.0	0.00139	1.266	100.00	0.15346	90.058
2012	212	0.913	0.913	0.971	0.231	13	8.4	>10.0	0.00124	1.016	100.00	Not A...	85.389
2011	171	0.609	0.565	0.868	0.182	11	7.9	>10.0	0.00166	1.192	100.00	Not A...	65.926
2010	236	1.067	1.033	1.129	0.083	12	8.3	>10.0	0.00184	1.116	100.00	Not A...	84.409
2009	260	0.694	0.611	1.065	0	11	8.3	>10.0	0.00129	0.669	100.00	Not A...	59.412
2008	192	1.294	1.176	0.883	0.053	19	7.2	>10.0	0.00195	0.937	89.47	Not A...	92.791
2007	177	0.921	0.894	0.688	0.059	17	7.2	>10.0	0.00149	0.687	88.24	Not A...	85.266
2006	169	0.525	0.450	Not A...	0.294	17	6.6	>10.0	Not A...	Not A...	88.24	Not A...	53.209
2005	129	0.410	0.282	Not A...	0.143	21	6.4	>10.0	Not A...	Not A...	95.24	Not A...	42.818
2004	118	0.278	0.250	Not A...	0	19	5.4	>10.0	Not A...	Not A...	100.00	Not A...	22.376
2003	136	0.568	0.568	Not A...	0	20	4.8	>10.0	Not A...	Not A...	100.00	Not A...	70.977
2002	103	0.553	0.553	Not A...	0.143	14	4.5	>10.0	Not A...	Not A...	100.00	Not A...	70.882
2001	69	0.583	0.527	Not A...	0.095	21	Not A...	>10.0	Not A...	Not A...	95.24	Not A...	76.087
2000	72	0.595	0.595	Not A...	0	17	Not A...	>10.0	Not A...	Not A...	100.00	Not A...	74.679

Source Data

Rank

Cited Journal Data

Citing Journal Data

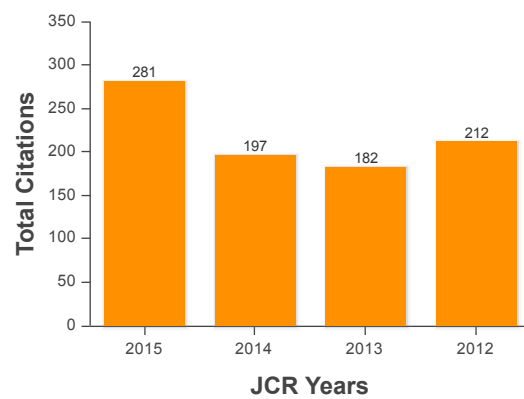
Box Plot

Journal Relationships

JCR Impact Factor

JCR Year	MATHEMATICS			LOGIC		
	Rank	Quartile	JIF Percentile	Rank	Quartile	JIF Percentile
2015	170/312	Q3	45.673	6/22	Q2	75.000
2014	107/312	Q2	65.865	4/21	Q1	83.333
2013	53/302	Q1	82.616	1/20	Q1	97.500
2012	50/296	Q1	83.277	3/20	Q1	87.500
2011	129/289	Q2	55.536	5/19	Q2	76.316
2010	44/279	Q1	84.409	NA	undefined	
2009	104/255	Q2	59.412	NA	undefined	
2008	16/215	Q1	92.791	NA	undefined	
2007	31/207	Q1	85.266	NA	undefined	
2006	88/187	Q2	53.209	NA	undefined	
2005	104/181	Q3	42.818	NA	undefined	
2004	141/181	Q4	22.376	NA	undefined	
2003	51/174	Q2	70.977	NA	undefined	
2002	50/170	Q2	70.882	NA	undefined	
2001	39/161	Q1	76.087	NA	undefined	
2000	40/156	Q2	74.679	NA	undefined	

JCR Year	MATHEMATICS
2015	373/487-Q4
2014	407/488-Q4
2013	397/473-Q4
2012	356/463-Q4



Help us improve the Journal Citation Reports by providing your feedback! [Click Here >](#)

THE BULLETIN OF SYMBOLIC LOGIC

Edited by

Frank Wagner, *Managing Editor*

Laurent Bienvenu

Deirdre Haskell

Patricia Blanchette

Menachem Kojman

Andrea Cantini

Leonid Libkin

Thierry Coquand

Reviews Editors

Ernest Schimmerling, *Managing Editor for Reviews*

Mark Colyvan

Bernard Linsky

Samuel Coskey

Colin McLarty

Anuj Dawar

Rahim Moosa

Michael Fourman

Henry Towsner

Steffen Lemp

Kai Wehmeier

VOLUME 22 • NUMBER 3 • SEPTEMBER 2016 • ISSN 1079-8986

Copyright © 2016 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 OF SYMBOLIC LOGIC.

Downloaded from <http://www.cambridge.org/core>. IP address: 178.91.17.137, on 23 Oct 2016 at 14:41:55, subject to the Cambridge Core terms of use, available at <http://www.cambridge.org/core/terms>. <http://dx.doi.org/10.1017/bsl.2016.28>

TABLE OF CONTENTS

ARTICLES

Using almost-everywhere theorems from analysis to study randomness, by KENSHI MIYABE, ANDRÉ NIES, AND JING ZHANG.	305
Relativizing operational set theory, by GERHARD JÄGER	332

REVIEWS

K. Kunen, <i>Set Theory</i> , Reviewed by DAVID MILOVICH	353
S. B. Cooper and A. Hodges (editors), <i>The Once and Future Turing: Computing the World</i> , Reviewed by ALASDAIR URQUHART	354
V. Capraro and M. Lupini, <i>Introduction to Sofic and Hyperlinear Groups and Connes' Embedding Conjecture</i> , Reviewed by LEWIS BOWEN.....	356
V. Kanovei, M. Sabok, and J. Zapletal, <i>Canonical Ramsey Theory on Polish Spaces</i> , Reviewed by CLINTON T. CONLEY.....	358

IN MEMORIAM

In Memoriam: Barry Cooper, 1943–2015	361
--	-----

2015 European Summer Meeting of the Association for Symbolic Logic, Logic Colloquium '15, Helsinki, Finland, August 3–8, 2015	366
22nd Workshop on Logic, Language, Information and Computation (WoLLIC 2015), Bloomington, Indiana, July 20–23, 2015	436
Model Theory and Groups, Istanbul 5, Istanbul, Turkey, October 8–10, 2015	438
Notices	439

2015 EUROPEAN SUMMER MEETING
OF THE ASSOCIATION FOR SYMBOLIC LOGIC
LOGIC COLLOQUIUM '15

Helsinki, Finland

August 3–8, 2015

Logic Colloquium '15, the 2015 European Summer Meeting of the Association for Symbolic Logic, was hosted by the University of Helsinki from August 3 to August 8, 2015. LC2015 was co-located with the 15th Congress of Logic, Methodology and Philosophy of Science (CLMPS 2015), and immediately preceded by the Scandinavian Logic Society Summer School in Logic (SLS 2015).

The lectures were held in the Porthania Building of the University of Helsinki and (for the joint lectures with CLMPS 2015) in the Main Building of the City Center Campus of the University of Helsinki. Major funding for the conference was provided by the Association for Symbolic Logic (ASL), the Federation of Finnish Learned Societies, the Emil Aaltonen Foundation, and the Department of Mathematics and Statistics, University of Helsinki.

The success of the meeting was due largely to the hard work of the Local Organizing Committee under the leadership of its Chair, Jouko Väänänen (University of Helsinki and University of Amsterdam). The other members were Aapo Halso, Mika Hannula, Lauri Hella, Åsa Hirvonen, Taneli Huuskonen, Tapani Hyttinen, Kaisa Kangas, Juliette Kennedy, Juha Kontinen, Kerkko Luosto, Miguel Moreno, Juha Oikkonen, Gianluca Paolini, Matti Pauna, and Fan Yang. The Program Committee consisted of Dag Westerståhl (Stockholm University, Chair), Andrej Bauer (University of Ljubljana), Zoe Chatzidakis (Université Paris Diderot Paris 7), Julia F. Knight (University of Notre Dame), Stephan Kreutzer (Technische Universität Berlin), Øystein Linnebo (University of Oslo), Koji Tanaka (University of Auckland), Jouko Väänänen (University of Helsinki and University of Amsterdam), Andreas Weiermann (Ghent University).

The main conference topics were: *Model Theory*, *Set Theory*, *Computability Theory*, *Proof Theory*, *Philosophy of Mathematics and Logic*, *Logic and Quantum Foundations*. The program included two tutorial courses, eleven invited plenary lectures, and twenty-four invited lectures in six special sessions. There were 167 contributed papers, of which 7 were by title only, and in all 222 participants from many different countries. Twenty-one students and recent Ph.D.'s were awarded ASL grants.

The joint CLMPS/LC2015 opening plenary lecture was given by Johan van Benthem (University of Amsterdam and Stanford University), with the title: *Logic in play*.

The following tutorial courses were given:

Erich Grädel (University of Aachen), *Dependence and independence in logic*.

Menachem Magidor (Hebrew University, Jerusalem), *On the set theory of generalized logics*.

The following invited plenary lectures were presented:

Toshiyasu Arai (Chiba University), *Proof theory of set theories*.

Sergei Artemov (CUNY), *Constructive knowledge*. (joint with CLMPS)

Steve Awodey (University of Pittsburgh), *Cubical homotopy type theory and univalence*. (joint with CLMPS)

$\text{Th}(M_1)$ and $\text{Th}(M_2)$ are ultrahomogeneous (over closed sets), i.e., if A, B are finite closed isomorphic subsets of a big model then $\text{tp}(A) = \text{tp}(B)$. In this talk, we will show that if the theory of a generic structure is ultrahomogeneous then it is nearly model complete.

[1] J. T. BALDWIN and S. SHELAH, *Randomness and semigenericity*. *Transactions of the American Mathematical Society*, vol. 349 (1997), pp. 1359–1376.

[2] E. HRUSHOVSKI, *A new strongly minimal set*. *Annals of Pure and Applied Logic*, vol. 62 (1993), pp. 147–166.

[3] M. POURMAHDIAN, *Simple generic structures*. *Annals of Pure and Applied Logic*, vol. 121 (2003), pp. 227–260.

- ASSYLBEK ISSAKHOV, *A-computable numberings of the families of total functions*. Department of Mechanics and Mathematics, Al-Farabi Kazakh National University, 71 Al-Farabi Ave., Almaty 050038, Kazakhstan.
E-mail: asylissakhov@mail.ru.

Following [2], we say that a numbering $v: \omega \mapsto \mathcal{F}$ of a family of A -computable functions is A -computable if the binary function $v(n)(x)$ is A -computable. In [1], it was posed several natural questions on numberings that are computable relative to an arbitrary oracle. We give answers for some of them below.

THEOREM 1. *Let A be an arbitrary set and F be an infinite A -computable family of total functions. If F has at least two nonequivalent A -computable Friedberg numberings, then F has infinitely many pairwise nonequivalent A -computable Friedberg numberings.*

THEOREM 2. *Let A be a hyperimmune set. If A -computable family F of total functions contains at least two functions, then F has no principal A -computable numbering.*

Remind, [4], that every nonzero degree comparable with $0'$ is hyperimmune.

Note that, for every A such that $0' \leq_T A$, it was shown, [3], that an infinite A -computable family F of total functions has, up to equivalence, infinitely many A -computable Friedberg numberings; and if F contains at least two functions, then F has no principal A -computable numbering.

[1] S. A. BADAIEV and S. S. GONCHAROV, *Generalized computable universal numberings*. *Algebra and Logic*, vol. 53 (2014), no. 5, pp. 355–364.

[2] S. S. GONCHAROV and A. SORBI, *Generalized computable numerations and nontrivial Rogers semilattices*. *Algebra and Logic*, vol. 36 (1997), no. 6, pp. 359–369.

[3] A. A. ISSAKHOV, *Ideals without minimal elements in Rogers semilattices*. *Algebra and Logic*, to appear.

[4] W. MILLER and D. A. MARTIN, *The degree of hyperimmune sets*. *Journal of Mathematical Logic and Foundations of Mathematics*, vol. 14 (1968), pp. 159–166 (In German).

- JULIA JANKOWSKA, *Gödel's philosophy of mathematics and structural realism about empirical sciences*. Department of Philosophy, University of Warsaw, Krakowskie Przedmieście 3, 00-047 Warsaw, Poland.
E-mail: juliajankowska@gmail.com.

The philosophy of abstract concepts to be found in the writings of Gödel may be combined with structural realism in the philosophy of empirical sciences.

On the one hand, the philosophy of mathematics that transpires from Gödel's papers can be interpreted as a kind of structural realism itself. On the other hand, structural realism in mathematics can be complemented by structural realism about empirical sciences as proposed by Ladyman and Ross [1], to jointly form a full and sufficient metaphysics. The main reason for combining Gödel with Ladyman and Ross is that despite the crucial role of mathematics in the empirical sciences, their book lacks an account of it. I will apply the structural realism of Ladyman and Ross to a new domain, mathematics, thus offering a clear position that is similar, and could be ascribed, to Gödel.

In my presentation, I will provide a summary of my interpretation of Gödel's views, which is alternative to Tieszen's monograph [2] and more general than the partial accounts to be found in many articles on Gödel. I will immerse it in one of the most convincing