

Trevor Wilson

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Education

- 2012:** PhD, Mathematics, University of California, Berkeley
Advisor: John Steel
Thesis: “Contributions to Descriptive Inner Model Theory”
- 2006:** BS, Mathematics, California Institute of Technology

Research interests

- Set theory: large cardinals, determinacy, inner model theory, descriptive set theory

Employment

- 2013–present:** Visiting Assistant Professor, Department of Mathematics, University of California, Irvine
- Fall 2012:** Postdoctoral Fellow, Thematic Program on Forcing and its Applications, Fields Institute, Toronto
- 2009–2012:** Graduate Student Researcher/Instructor, Department of Mathematics, University of California, Berkeley

Awards

- 2006:** NSF Graduate Research Fellowship

Publications

- 2015:** *The envelope of a pointclass under a local determinacy hypothesis*, *Annals of Pure and Applied Logic*, 2015.
- 2015:** *Scales on Π_1^2 sets*, *Mathematical Research Letters*, **22**, pp. 301–316
- 2005:** *A continuous movement version of the Banach–Tarski paradox: A solution to De Groot’s problem*, *Journal of Symbolic Logic*, **70**(3), pp. 946–952

Preprints

- 2014:** (with Paul Larson and Grigor Sargsyan) *A model of the Axiom of Determinacy in which every set of reals is universally Baire*. Available at math.uci.edu/~twilson/papers/every-set-uB.pdf
- 2013:** *Universally Baire sets and generic absoluteness*, submitted. Available at math.uci.edu/~twilson/papers/generic-absoluteness.pdf

Invited talks

- 2015 (expected):** “*Covering properties of derived models,*” Boise Extravaganza in Set Theory, San Francisco State University
- 2015:** “*Covering properties of derived models,*” Annual ASL Meeting, Special Session on Set Theory, University of Illinois at Urbana–Champaign
- 2015:** “*A model of set theory in which every set of reals is universally Baire,*” ASL Winter Meeting (with Joint Mathematics Meetings,) San Antonio, Texas
- 2014:** “*Scales on local Π_1^2 sets,*” Workshop on Descriptive Inner Model Theory, University of California, Berkeley
- 2014:** “*Optimal generic absoluteness results from strong cardinals,*” Mid-Atlantic Mathematical Logic Seminar, Miami University
- 2013:** “*Trees, maximality principles, and generic absoluteness,*” Mid-Atlantic Mathematical Logic Seminar, Rutgers University
- 2013:** “*Absolutely complementing trees and generic absoluteness,*” AMS Fall Southeastern Sectional Meeting, Special Session on Set Theory and its Applications, Louisville, Kentucky
- 2013:** “*A dichotomy for $(\Sigma_1^2)^{Hom\infty}$ sets of reals, with applications to generic absoluteness,*” Young Set Theory Workshop, Oropa, Italy
- 2013:** “*A determinacy transfer principle,*” UCLA Logic Colloquium
- 2012:** “*The next Suslin cardinal in $ZF + DC_{\mathbb{R}}$,*” Workshop on Inner Model Theory and Descriptive Set Theory, University of North Texas
- 2011:** “*The strength of properties of ideals in the \mathbb{P}_{max} extension of a model of $AD_{\mathbb{R}} + \Theta$ regular,*” Second Conference on the Core Model Induction and Hod Mice, University of Münster, Germany
- 2010:** Lectures on the core model induction technique, Conference on the Core Model Induction and Hod Mice, University of Münster, Germany

Other talks

- 2014:** “*Determinacy models and good scales at singular cardinals,*” Logic in Southern California Meeting, University of California, Los Angeles
- 2013:** “*Trees and generic absoluteness,*” Logic in Southern California Meeting, University of California, Los Angeles
- 2013:** Lectures on the derived model theorem, Graduate Summer School in Set Theory, University of California, Irvine
- 2013:** “*Scales on Π_1^2 sets,*” Logic in Southern California Meeting, University of California, Irvine
- 2012:** “*Well-behaved measures and weak covering for derived models,*” Toronto Set Theory Seminar
- 2004:** “*A continuous version of the Banach–Tarski paradox,*” Caltech–UCLA Logic Seminar

Courses taught

Spring 2015: Introduction to Rings and Fields

Winter 2015: Introduction to Group Theory

Fall 2014: Introduction to Group Theory

Spring 2014: Modern Geometry

Winter 2014: Introduction to Abstract Mathematics

Fall 2013: Set Theory (graduate course)

Spring 2013: Infinite Series and Basic Linear Algebra

Winter 2013: Set Theory (undergraduate course)