

KAMERYN J WILLIAMS

kwilliams4@gradcenter.cuny.edu · kamerynblog.wordpress.com

Ph.D. Program in Mathematics · The Graduate Center, The City University of New York
365 Fifth Avenue, New York, NY 10016

EDUCATION

Ph.D. in Mathematics, (Expected) May 2018

The Graduate Center, The City University of New York

Dissertation Advisor: Joel David Hamkins (jdh.hamkins.org)

Dissertation Title: The structure of models of second-order set theories

B.S. in Mathematics, Dec 2012, High Honors

Boise State University

Minor in Computer Science

Overall GPA: 3.852

PUBLICATIONS

Kameryn J. Williams, *The Structure of Models of Second-Order Set Theories*, Ph.D. Dissertation, The City University of New York, eprint: arXiv:1804.09526 [math.LO] (2018).

Joel David Hamkins, Philip Welch, Kameryn Williams, The universal finite sequence of ordinals in the constructible universe, *in preparation*.

Miha Habič, Joel David Hamkins, Lukas Daniel Klausner, Jonathan Verner, and Kameryn J. Williams, Set-theoretic blockchains, *in preparation*.

Kameryn J. Williams, Least models of second-order set theories, *under review*, eprint: arXiv:1709.03955 [math.LO] (2017).

Victoria Gitman, Joel David Hamkins, Peter Holy, Philipp Schlicht, and Kameryn Williams, The exact strength of the class forcing theorem, *under review*, eprint: arXiv:1707.03700 [math.LO] (2017).

CONFERENCE TALKS

On the length of iterated full satisfaction classes, *Warsaw Workshop on Formal Truth Theories*, Institute of Philosophy, University of Warsaw (Sept 2017).

Minimal models of Kelley-Morse set theory, *Boise Extravaganza in Set Theory*, part of the 97th Annual Meeting of the AAAS Pacific Division, University of San Diego (June 2016).

Minimal models of Kelley-Morse set theory, *NY Graduate Student Logic Conference*, The Graduate Center, CUNY. (May 2016).

Minimal models of second-order set theories, Set Theory Day, The Graduate Center, CUNY (Mar 2016).

SEMINAR TALKS

Strong second-order set theories do not have least transitive models, *Logic and Computation Seminar*, University of Pennsylvania (Nov 2017).

The length of inductive iterated full satisfaction classes, *Models of Peano Arithmetic Seminar*, The Graduate Center, CUNY (Oct 2017).

Chains and antichains of finitely axiomatizable theories conservative over Peano Arithmetic, *Models of Peano Arithmetic Seminar*, The Graduate Center, CUNY (Oct 2017).

The exact strength of the class forcing theorem, *Set Theory Seminar*, The Graduate Center, CUNY (Oct 2017).

The exact strength of the class forcing theorem, *Research Seminar*, Kurt Gödel Research Center, University of Vienna (Sept 2017).

Separating Class Determinacy, *Set Theory Seminar*, The Graduate Center, CUNY (Nov 2016).

Models of arithmetic with two expansions to ACA_0 , *Models of Peano Arithmetic Seminar*, The Graduate Center, CUNY (Oct 2016).

Yet more forcing in arithmetic: life in a second-order world, *Models of Peano Arithmetic Seminar*, The Graduate Center, CUNY (Sept 2016).

Recursive definability of the standard cut, *Models of Peano Arithmetic Seminar*, The Graduate Center, CUNY (Oct 2015).

Is there a least transitive model of Kelley-Morse set theory? *Set Theory Seminar*, The Graduate Center, CUNY (Oct 2015).

Admissible covers and compactness arguments for ill-founded models of set theory, *Set Theory Seminar*, The Graduate Center, CUNY (Sept 2015).

A perfectly generic talk, *Models of Peano Arithmetic Seminar*, The Graduate Center, CUNY (Apr 2015).

Rather classless models of set theory and second-order set theory, *Set Theory Seminar*, The Graduate Center, CUNY (Mar 2015).

Forcing over models of arithmetic, *Models of Peano Arithmetic Seminar*, The Graduate Center, CUNY (Nov 2014).

Scott's problem for models of ZFC, *Set Theory Seminar*, The Graduate Center, CUNY (Oct 2014).

On the independence of Borel's conjecture, *Set Theory Seminar*, The Graduate Center, CUNY (Apr 2014).

AWARDS AND FELLOWSHIPS

Quantitative Reasoning Fellowship, The Graduate Center, CUNY. 2017–2018 academic year.

Graduate Teaching Fellowship, The Graduate Center, CUNY. 2014–2016 academic years.

University Fellowship, The Graduate Center, CUNY. 2014–2015 academic year.

Tuition Fellowship, The Graduate Center, CUNY. 2013–2018 academic years.

Student Award of Excellence, 2nd place, Mathematics Section, for presentation “Minimal models of Kelley–Morse set theory.” AAAS Pacific Division 2016 meeting.

TEACHING

Bronx CC, CUNY

Fall 2017–Spring 2018

Quantitative Reasoning Fellow

In this interdisciplinary program I partnered with non-mathematics faculty to promote the teaching of quantitative reasoning and the use of mathematical methods across the curriculum. I gave guest lectures in classrooms, conducted training for faculty, and advised them on how to incorporate the teaching of quantitative reasoning in their courses.

Brooklyn College, CUNY

Fall 2013–Spring 2017

Lecturer

Fall 2016–Spring 2017

Graduate Teaching Fellow C

Fall 2014–Spring 2016

Teaching Assistant

Fall 2013–Spring 2014

My last three years I taught a combined total of ten undergraduate courses. For each class I was in charge of writing a syllabus, giving lectures, assigning homework, writing and grading exams, holding office hours, and assigning grades. My final year at Brooklyn College I taught in their Brooklyn College Academy program, an early-college program where high school juniors and seniors take college courses for credit. My first year at Brooklyn College I worked as a teaching assistant, holding recitation sessions and grading exams.

Courses Taught:

Math 1011 Precalculus Mathematics

Math 1201 Calculus I

Math 1021 Precalculus Mathematics A

Math 1311 Thinking Mathematically

Math 1026 Precalculus Mathematics B

SERVICE

Co-organizer (with V. Gitman), *MAMLS Logic Friday*, Mid-Atlantic Mathematical Logic Seminar, The Graduate Center, CUNY. Oct 2017.

Co-organizer (with V. Gitman), *Set Theory Seminar*, The Graduate Center, CUNY. Fall 2017–present.

Co-organizer (with A. Dolich), *Models of Peano Arithmetic Seminar*, The Graduate Center, CUNY, Fall 2017–present.

Organizer, *Student Set Theory Seminar*, The Graduate Center, CUNY. Fall 2017–present.