Donald Brower Curriculum Vitae

University of Notre Dame Department of Mathematics 255 Hurley Hall Notre Dame, IN 46556-4618 Email: dbrower@nd.edu Webpage: www.nd.edu/~dbrower

Education

- Ph.D., Mathematics, expected May 2012, University of Notre Dame Advisor: Steven Buechler
- M.S., Mathematics, May 2006, University of Notre Dame
- B.S., Mathematics, December 1999, Colorado State University Graduated cum laude, University Honors Scholar Minor in Music Composition

Teaching

Instructor, University of Notre Dame

ACMS-20340: Statistics for Life Sciences, Spring 2012. For pre-professional covered basic statistical concepts including hypothesis testing and ANOVA. Emphasis on applications and interpretation.

- ACMS-20340: Statistics for Life Sciences, Fall 2011.
- ACMS-20340: Statistics for Life Sciences, Fall 2010.
- M-10120: Finite Math, Fall 2009. Math elective for non-math majors. Covered probability, linear programming, and game theory.
- M-10240: Principles of Calculus, Summer 2007. Single semester calculus sequence for liberal arts students.

Teaching Assistant, University of Notre Dame

- M-12560: Calculus II, Fall 2008. Part of the sequence for engineering and science students.
- M-12550: Calculus I, Fall 2007. Part of the sequence for engineering and science students.
- M-12360: Calculus B, Spring 2007. For pre-medicine and pre-professional students.

Teaching Assistant, Wesleyan University

- M-225: Fundamentals of Analysis, Spring 2005. Higher level course serving as an introduction to mathematical proofs.
 - M-118: Introductory Calculus II, Fall 2004.

Outstanding Graduate Student Teacher Award, Notre Dame, 2010.

Talks Given

⁻ AMS-MAA Joint Meeting in Boston, Indiscernible Sequences in Simple Theories, January 2012

⁻ University of Illinois Urbana-Champaign Logic Seminar, 1-Based Supersimple Theories, November 2011

- University of Waterloo Logic Seminar, Forking Dependence in Simple Theories, October 2011

- McMaster University Logic Seminar, Forking Dependence in Simple Theories, October 2011
- University of Illinois Chicago Logic Seminar, 1-Based Supersimple Theories, October 2011
- Notre Dame Logic Seminar, Indiscernible Sequences and Simplicity, September 2011
- Notre Dame Graduate Student Seminar, The Random Graph is Simple, Fall 2008
- Notre Dame Graduate Student Seminar, Minimally Interesting: A theory with minimal models but no

prime model, Spring 2007

Papers

- Another look at stable forking in 1-based supersimple theories, with C.D. Hill, submitted.

- On forking, thorn-forking, and weak elimination of hyperimaginaries, in preparation.

Meetings Attended

- Joint Mathematics meeting, Boston, January 2012
- Logic and Mathematics, University of Illinois at Urbana-Champaign, September 2011
- Recent Developments in Model Theory, Oleron, France, June 2011
- Midwest Model Theory Day, UIC, April 2011
- ASL Annual Meeting, Berkeley, March 2011
- Joint Mathematics meeting, New Orleans, January 2011
- Midwest model theory, UIC, October 2010
- Mathematical Research Community Special Section on Model Theory, Utah, June 2010
- Joint Mathematics meeting, San Fransico, January, 2010
- Midwest Model Theory, University of Illinois at Urbana-Champaign, November 2009
- Urbana in Lyon, Universit Lyon 1, July 2009
- AMS Sectional Meeting, University of Notre Dame, May 2009
- The matic Program on O-minimal Structures and Real Analytic Geometry, Fields Institute, Spring 2009
- Midwest Model Theory, University of Illinois at Chicago, April 2008
- Graduate Student Conference in Logic, University of Notre Dame, April 2008
- Graduate Student Conference in Logic, University of Illinois at Chicago, April 2007
- AMS Sectional Meeting, University of Illinois at Chicago, October 2007
- Graduate Student Conference in Logic, University of Wisconsin-Madison, April 2006

Service

- Speaker, "Teaching Finite Math", University of Notre Dame, Spring 2010
- Speaker, "Experiences in Teaching," Teaching Assistant Training, University of Notre Dame, Fall 2009
- Treasurer, Mathematics Graduate Student Association, University of Notre Dame, 2006–2009
- Organizer, Graduate Student Seminar, University of Notre Dame, 2006–2008
- Organizer, Regional Graduate Student Conference in Logic, University of Notre Dame, Spring 2008
- Member, Graduate Student Recruiting Committee, University of Notre Dame, 2006–2007

Awards and Membership

- Outstanding Graduate Student Teacher Award, Notre Dame, 2010
- Participant in AMS-Mathematics Research Communities, 2010
- Arthur J. Schmitt Presidential Fellowship, Notre Dame, 2005–2009
- American Mathematical Society, 2005–Present
- Association for Symbolic Logic, 2005–Present
- Phi Beta Kappa, 1998
- College of Natural Sciences Undergraduate Scholarship, Colorado State University, 1997

Work Experience

- 2004 Fleetwood Gaming Worked as a programmer and mathematician. Created mathematical models for keno games as well as an algorithm for random number generator. Developed a general programming framework for an embedded Linux operating system.
- 2000–2004 ShuffleMaster, Inc. Programmer and mathematical analyst. Performed statistical analysis on random number generators; developed slot machine pay tables; programmer on a small team designing and implementing a secure operating system for slot machines (approx. 100K lines of code).