

CURRICULUM VITAE  
Logan Axon

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EDUCATION:

- PhD in Mathematics, University of Notre Dame, May, 2010  
Thesis: “Algorithmically random closed sets and probability”  
Adviser: Peter Cholak
- BA in Mathematics (with honors), Grinnell College, May, 2003

EMPLOYMENT:

- Assistant Professor, Gonzaga University, 2010 to present

HONORS AND AWARDS:

- Project NExT Fellow, 2010-2011
- Striving for Excellence in College and University Teaching Certificate; awarded by the Kaneb Center for Teaching and Learning at the University of Notre Dame, 2008
- Arthur J. Schmitt Fellowship, 2004-2008
- Linn Smith Prize for Excellence in Mathematics awarded by the Grinnell College Department of Mathematics, 2003

PUBLICATIONS:

- “Martin-Löf randomness in spaces of closed sets,” *Journal of Symbolic Logic* vol. 80 no. 2 (2015) pp 359-383
- “TT-functionals and Martin-Löf randomness for Bernoulli measures,” *Missouri Journal of Mathematical Sciences* vol. 27 no. 1 (2015) pp 80-86
- “Martin-Löf random generalized Poisson Processes,” draft available, pp 1-16

CONFERENCE PRESENTATIONS:

- “Martin-Löf Randomness for Bernoulli measures” at the PNW MAA meeting, Tacoma, WA, April 11, 2015
- “Martin-Löf random closed sets” at the AMS Western Sectional Meeting, Honolulu, HI, March 4, 2012
- “Random closed subsets of the real line” at the 5<sup>th</sup> Conference in Logic, Computability, and Randomness, South Bend, IN, May, 2010
- “Algorithmically random closed sets and probability” at the Micro-Symposium on Random Closed Sets and Logic, Honolulu, HI, May, 2009
- “Algorithmically random closed sets and probability” at the 2009 Graduate Student Conference in Logic, Champaign, IL, April, 2009
- “Algorithmically random closed sets and probability” at the Algorithmic Randomness FRG meeting, Berkeley, CA, February, 2009
- “Random closed sets and probability” at the Joint Meetings of the AMS and MAA, Washington, DC, January, 2009
- “Searching for (96, 20, 40) difference sets” at the Iowa Meeting of the MAA, Cedar Rapids, IA, April, 2003

OTHER SCHOLARLY PRESENTATIONS:

- “When is flipping one biased coin just as good as flipping another” at the Spokane Regional Colloquium, December, 2014
- “A mathematical perspective on perspective” at the Gonzaga in Florence Pro-Seminar, March, 2013
- “Hilbert, Gödel, and the limits of computation” at the Spokane Regional Colloquium, April, 2011
- “Random fractals” at Pacific Lutheran University, November, 2010
- “Algorithmically random closed sets” at the Ohio State University Logic Seminar, May, 2010
- “Random fractals” at the Ohio State University Radical II Seminar, May, 2010
- “Random Fractals” at Gonzaga University, April, 2010
- “Random closed sets and probability” at the Midwest Computability Seminar, University of Chicago, September, 2008
- “A short tour of algorithmic randomness” at the Notre Dame Graduate Student Seminar, February, 2008
- “Effective randomness for fun and profit” at the Notre Dame Graduate Student Seminar, October, 2006
- “Measure and domination” at the Notre Dame Logic Seminar, February, 2006

OTHER CONFERENCES ATTENDED:

- PNW MAA, Portland, OR, April 2012
- Joint Meetings of the AMS and MAA, Boston, MA, January 2012
- MathFest, Lexington, KY, August 2011
- Legacy of R.L. Moore Conference, Washington, DC, June 2011
- Joint Meetings of the AMS and MAA, New Orleans, LA, January 2011
- MathFest, Pittsburgh, PA, August 2010
- Joint Meetings of the AMS and MAA, San Francisco, CA, January 2010
- Graduate Student Conference in Logic, University of Notre Dame, April 2008
- Joint Meetings of the AMS and MAA, San Diego, CA, January 2008
- Workshop on Effective Randomness, University of Chicago, September 2007
- Graduate Student Conference in Logic, University of Illinois at Chicago, April, 2007
- AIM/ARCC Workshop on Effective Randomness, Palo Alto, CA, August 2006
- Graduate Student Conference in Logic, University of Wisconsin at Madison, April 2006
- AMS Central Section Meeting, University of Notre Dame, April 2006
- Proof Theory Workshop, University of Notre Dame, June 2005
- Workshop on Vaught’s Conjecture, University of Notre Dame, May 2005
- Joint Meetings of the AMS and MAA, Baltimore, MD, January, 2003

COURSES TAUGHT (ALL AT GONZAGA UNIVERSITY UNLESS OTHERWISE NOTED):

- Fall 2015
  - Math 421 Probability Theory
  - Math 258 Calculus-Analytic Geometry II
- Spring 2015
  - Math 301 Fundamentals of Mathematics
  - Math 259 Calculus-Analytic Geometry III
- Fall 2014
  - Math 499 Senior Comprehensive
  - Math 301 Fundamentals of Mathematics
  - Math 157 Calculus-Analytic Geometry I
- Spring 2014
  - Math 422 Mathematical Statistics
  - Math 259 Calculus-Analytic Geometry III
- Fall 2013
  - Math 421 Probability Theory
  - Math 157 Calculus-Analytic Geometry I

- Spring 2013 (Gonzaga in Florence)
  - Math 321 Statistics for Experimentalists
  - Math 260 Ordinary Differential Equations
- Fall 2012
  - Math 258 Calculus-Analytic Geometry II
  - Math 499 Senior Comprehensive
- Spring 2012
  - Math 157 Calculus-Analytic Geometry I
  - Math 422 Mathematical Statistics
- Fall 2011
  - Math 148 Survey of Calculus
  - Math 421 Probability Theory
- Spring 2011
  - Math 321 Statistics for Experimentalists
  - Math 414 Advanced Calculus II
- Fall 2010
  - Math 413 Advanced Calculus I
  - Math 147 Precalculus
- Fall 2009 (University of North Texas)
  - Elementary Probability and Statistics (Math 1680)
- Summer 2009 (University of Notre Dame)
  - Introduction to Probability (Math 30530)
- Summer 2007 (University of Notre Dame)
  - Calculus II for Business (Math 10260)

SERVICE:

- UNIVERSITY
  - University Budget Committee, Fall 2014 to present
  - STEM Honors Committee, Spring 2015 to present
  - Commencement Awards Committee, Fall 2012 to Spring 2014
- COLLEGE
  - Arts and Sciences Technology Review (led by Brett Hendricks), Spring 2014
  - Dean's Strategic Thinking Committee, Fall 2011
- DEPARTMENT
  - Departmental Assessment Committee, Fall 2014 to present
  - Organizer/co-organizer, Gonzaga University Math Club, Fall 2010 to present
  - Adviser for the William Lowell Putnam Mathematical Competition, Fall 2010 to present
  - Library Liaison, 2014-15 AY
  - Departmental Criteria Committee, 2013-14 AY
  - Career Center Liaison, 2013-14 AY
  - School of Business Liaison, Fall 2012
  - Department Search Committee Member, Fall 2012
  - Adviser for the Mathematical Contest in Modeling, February, 2011
- OTHER
  - Instructor, Spokane Math Circle, Spring and Fall 2012
  - Adviser for the Actuarial Sciences Club, Spring 2012 to present
  - Co-organizer, 5<sup>th</sup> Conference on Logic, Computability, and Randomness, May 24–28, 2010

MEMBERSHIP:

- Mathematical Association of America
- Association for Symbolic Logic
- Phi Beta Kappa (inducted May, 2003)