

Christopher Shaw

pronouns: he/him/his

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Education

PhD Mathematics, University of Maryland College Park, 2008

BA Mathematics; Spanish Language and Literature, George Washington University, 2001

Employment

Columbia College Chicago, Associate Professor, 2016 -

Columbia College Chicago, Assistant Professor, 2010 - 2016

University of Maryland, Associate Director of Norbert Wiener Center, 2008 - 2010

University of Maryland, Graduate Teaching Assistant, 2001 - 2006

Teaching

Columbia College Chicago

- College-level mathematics instruction: Liberal Arts Mathematics, College Mathematics, Quantitative Reasoning, Introduction to Statistics, Mathematical Ideas (online course), Math in Art & Nature
- Advanced undergraduate instruction: Calculus I - III, Linear Algebra, Differential Equations
- Courses developed: Liberal Arts Mathematics, Modeling Biological Systems with Differential Equations, Mathematical Analysis of Games (for High School Summer Institute)

University of Maryland

- Large-lecture instruction: Elementary Calculus I - II
- Sole contact classroom instruction: Introduction to Probability, Precalculus II, Math for Elementary School Teachers I - II
- Teaching assistant/grader: Elementary Calculus I - II, Math SPIRAL summer research program, Introduction to Mathematical Logic (graduate course)

Publications

- "Assessing and Encouraging Student Participation in Remote Asynchronous Courses," to be submitted to *Problems, Resources, and Issues in Mathematics Undergraduate Studies (PRIMUS)* (2022)
- "Observing Demand Elasticity with Direction Fields," applied project invited for *Differential Equations with Boundary Value Problems 9E*, D. Zill, Cengage Learning (2020)
- Invited book review for *Euler's Pioneering Equation: The most beautiful theorem in mathematics* (author Robin Wilson), *Mathematics Teacher* vol. 112 no. 6, p. 477 (2019)

- “Exploring personality profiles with matrices,” *Problems, Resources, and Issues in Mathematics Undergraduate Studies* (PRIMUS), DOI 10.1080/10511970.2017.1388316 (2018)
- “Definable choice for a class of weakly o-minimal theories,” with M. C. Laskowski, *Archive for Mathematical Logic*, vol. 55, no. 5, pp. 735–748 (2016), <http://rdcu.be/nnCc>
- “Quantitative literacy: Problems that motivate,” *Ohio Journal of School Mathematics*, vol. 72 (2015), tinyurl.com/shawql
- “Using data from real sources: Motivating statistics definitions on day one,” with G. Johnson, *Mathematics in Michigan*, vol. 46, no. 2 (2013), tinyurl.com/johsha
- “Weakly o-minimal structures and Skolem functions,” Dissertation (2008), tinyurl.com/shawth
- “Zero autocorrelation waveforms: A Doppler statistic and multifunction problems,” with J. Benedetto, J. Donatelli, and I. Konstantinidis, *Proceedings of the 2006 IEEE International Conference on Acoustics, Speech, and Signal Processing* (2006), tinyurl.com/zacciss
- “A Doppler statistic for zero autocorrelation waveforms,” with J. Benedetto, J. Donatelli, and I. Konstantinidis, *Proceedings of the 2006 IEEE Conference on Information Science and Systems* (2006), tinyurl.com/zacdoppler

Conference and Seminar Presentations

- *Assessing Participation in the Time of Black Squares*, MAA MathFest, August 2021
- *Sharing Your Innovations as Scholarly Articles*, with D. Jordan, Annual Meeting of the Illinois Council of Teachers of Mathematics, October 2019
- *Unifying sets and logic with the real world in a Liberal Arts Mathematics course*, MAA session at JMM, January 2019
- *Writing an article for the Illinois Mathematics Teacher journal*, with D. Jordan, Annual Meeting of the Illinois Council of Teachers of Mathematics, October 2018
- *Understanding legal terminology through symbolic logic*, MAA session at JMM, January 2018
- *Definable Skolem functions for weakly o-minimal structures*, University of Illinois at Chicago, January 2017 (invited)
- *Skolem functions for a weakly o-minimal structure with a new convex predicate*, ASL winter meeting, January 2017
- *Definable choice for a class of weakly o-minimal structure*, Southern Wisconsin Logic Colloquium, November 2016 (invited)
- *Skolem functions for a weakly o-minimal structure with a new convex predicate*, University of Notre Dame, October 2016 (invited)
- *Writing an article for the IMT journal*, with D. Jordan, Annual Meeting of the Illinois Council of Teachers of Mathematics, October 2016
- *Exploring personality profiles with matrices*, MAA session at JMM, January 2016
- *Transforming assessment of student learning in a multi-discipline department*, with G. Adams, D. Jordan, T. McCaskey, and J. Minbiole, NSTA Annual Conference, March 2015
- *The unsuspecting analyst: Mathematics that needs no introduction*, MAA session at JMM, January 2015
- *Does inherent Platonism predict strength in abstract mathematics?*, with G. Johnson and H. Johnson, MAA session at JMM, January 2014
- *Gödel’s incompleteness theorems*, Elmhurst College Mathematics Seminar Series, March 2014 (invited)

- *Writing an article for the Illinois Mathematics Teacher journal*, with D. Jordan, Annual Meeting of the Illinois Council of Teachers of Mathematics, October 2013
- *Two ideas that shook the foundations of mathematics*, Science and Mathematics Colloquium, Columbia College Chicago, April 2013 (invited)
- *Writing an article for the Illinois Mathematics Teacher journal*, with D. Jordan, Metropolitan Mathematics Club Conference of Workshops, Chicago, January 2013
- *Voting alliances: Using politics to motivate combinatorial counting*, MAA session at JMM, January 2013
- *Skolem functions in weakly o-minimal structures*, University of Illinois at Chicago, April 2011 (invited)
- *Ordered structures, o-minimality, and definable choice*, Carnegie Mellon University, March 2011 (invited)
- *The war on apathy in a terminal statistics course: Motivating definitions from day one*, with G. Johnson, MAA session at JMM, January 2011
- *Definable choice for a class of weakly o-minimal structures*, ASL winter meeting, January 2011
- *Model theory and definable sets in ordered structures I-II*, George Washington University, February 2010 (invited)
- *Skolem functions in weakly o-minimal structures*, University of Maryland logic seminar, April 2008
- *Weakly o-minimal structures and Skolem functions*, McDaniel College, March 2008 (invited)
- *Definability in weakly o-minimal structures*, Spotlight conference, University of Maryland, April 2007 (invited)
- *What are the 'strongest' weakly o-minimal structures?*, US Naval Academy, January 2007 (invited)
- *Weakly o-minimal structures*, University of Maryland logic seminar, January 2007
- *Orthogonality and dimension*, University of Maryland logic seminar, November 2006
- *How strong is weak o-minimality?*, University of Maryland logic seminar, February 2006
- *Independence in totally transcendental theories*, University of Maryland logic seminar, September 2004
- *Still more classical o-minimal structures*, University of Maryland logic seminar, May 2004
- *Classical o-minimal structures and theories*, George Washington University, February 2004 (invited)
- *Definability and decidability in some familiar rings*, University of Maryland logic seminar, May 2003
- *A few classical results in the model theory of fields*, George Washington University, April 2003 (invited)
- *The model theory of fields*, University of Maryland logic seminar, March 2003
- *Indiscernibles in first-order logic*, University of Maryland logic seminar, March 2002

Conferences Organized

- Midwest Model Theory Day conference, University of Illinois Chicago, April 2012 (co-organizer)
- Midwest Model Theory Day conference, University of Illinois Chicago, October 2011 (co-organizer)
- February Fourier Talks, University of Maryland, February 2009 (co-organizer)
- February Fourier Talks, University of Maryland, February 2008 (co-organizer)
- February Fourier Talks, University of Maryland, February 2007 (co-organizer)
- February Fourier Talks, University of Maryland, February 2006 (co-organizer)
- Spotlight on Graduate Research, University of Maryland, Fall 2004 (co-organizer)
- Spotlight on Graduate Research, University of Maryland, Fall 2003
- Spotlight on Graduate Research, University of Maryland, Fall 2002

Professional Service

- Co-editor, *Illinois Mathematics Teacher*, official journal of the Illinois Council of Teachers of Mathematics (2012 - present)
- Journal referee: *Problems, Resources, and Issues in Mathematics Undergraduate Studies* (PRIMUS); *Mathematics Teacher*, journal of the National Council of Teachers of Mathematics; *Mathematics in Michigan*, journal of the Michigan Council of Teachers of Mathematics

Selected College Service Roles

- Academic coordinator for various content areas (10 - 20 sections per semester)
- Search committee for new Senior Vice President and Provost, 2018 - 2019
- Columbia Core Committee (ex-officio), 2018 -
- Faculty Senate
 - interim senator, spring 2016
 - full member, elected to Executive Committee, 2018 - 2020
 - elected Senate Secretary, 2019 - 2022
- Liberal Arts and Sciences Curriculum Committee, 2017 - 2018
 - chair for AY 2017 - 2018
- Science and Mathematics DEI Pedagogy Committee, 2019 -
- Science and Mathematics Assessment Committee, 2013 - 2016; 2020 -
- Science and Mathematics Curriculum Committee, 2011 - 2013; 2017 - 2019
 - chair for AY 2017 - 2018 and AY 2018 - 2019
- College-wide Sabbatical Committee, 2017 - 2019
- Ad-hoc Work Group on Faculty Workload, 2017
- Ad-hoc Work Group on Faculty Compensation, 2016
- College-wide Excellence in Teaching Awards Committee, 2014 - 2016
 - chair for AY 2015 - 2016
- Science and Mathematics Assessment Committee, 2013 - 2016
- Development committee for Bachelor of Science program in Computational and Applied Mathematics, 2013 - 2015
- Search Committee for full-time faculty member in Poetry, 2011 and 2012

Memberships

- Association for Symbolic Logic
- National Council of Teachers of Mathematics
- Illinois Council of Teachers of Mathematics