

Bobby L. E. Wilson

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Education

Ph.D. Mathematics, The University of Chicago, 2015, adviser: Wilhelm Schlag.

Thesis: *Three Results in Analysis*.

M.S. Mathematics, The University of Chicago, 2012.

B.S. Mathematics, Morehouse College, 2010.

Current Positions

C.L.E. Moore Instructor, Dept. of Math., Massachusetts Institute of Technology, January 2016–present.

Fields of Research Interest

Harmonic Analysis, PDE, Dynamical Systems, Geometric Measure Theory.

Honors, Awards, & Fellowships

GAANN Fellowship, The University of Chicago, 2011, 2012.

NSF Mathematical Science Postdoctoral Research Fellowship, 2015 (declined).

MSRI Postdoctoral Fellowship, Fall 2015 (*New Challenges in PDE*).

CLE Moore Instructorship, MIT, 2015-2018.

MSRI Postdoctoral Fellowship, Spring 2017 (*Harmonic Analysis*).

Teaching

The University of Chicago

Honors Calculus (Inquiry Based Learning) (Math 161-162-163), 2011-2012, College Fellow for A. Pulemotov, M. Borman.

Calculus (Math 131-132), Fall 2012, Winter 2013.

Calculus (Math 152-153), Fall 2013, Winter 2014.

Calculus (Math 153), Fall 2014.

Linear Algebra (Math 19620), Spring 2013.

VIGRE Summer REU mentor, Summer 2011, Summer 2012.

Basic Math, Chicago Academic Achievement Program, Summer 2013.

Massachusetts Institute of Technology

Differential Equations (18.03), Spring 2016, Recitation leader for D. Jerison, J. Kelner.

Real Analysis (18.100Q), Fall 2016.

Calculus (18.01A-B), Fall 2017, Recitation leader for D. Maulik, T. Beck.

Differential Geometry (18.950), Spring 2018.

Conference and Seminar Presentations

University of Illinois at Urbana-Champaign, Analysis Seminar, September 2014.

University of Wisconsin-Madison, Analysis Seminar, April 2015.

University of Washington-Seattle, Analysis Seminar, May 2015.

Invited Speaker, Relations between Banach Space Theory and Geometric Measure Theory, University of Warwick, June 2015.

Invited Speaker, CAARMS Conference, ICERM, June 2015.

Mathematical Sciences Research Institute, Post-Doc Seminar, August 2015.

Massachusetts Institute of Technology, Analysis Seminar, February 2016.

Invited Speaker, AMS Spring Eastern Sectional Meeting, SUNY at Stony Brook, March 2016.

Northeastern, Post-Doc Seminar, April 2016.

Invited Speaker, FRG Conference at MIT, September 2016.

Invited Speaker, Modern Math Workshop, IPAM, October 2016.

Mathematical Sciences Research Institute, Post-Doc Seminar, February 2017.

University of Illinois at Urbana-Champaign, Mathematics Colloquium, April 2017.

Invited Speaker, Recent Developments in Harmonic Analysis, MSRI, May 2017.

Publication List

B. Wilson, *Sets with Arbitrarily Slow Favard Length Decay*, arXiv:1707.08137, 2017, submitted.

C. Fan, G. Staffilani, H. Wang, B. Wilson, *On a bilinear Strichartz estimate on irrational tori and some application*, Analysis & PDE, to appear, 2016.

D. Bate, M. Csörnyei, and B. Wilson. *The Besicovitch–Federer projection theorem is false in every infinite-dimensional Banach space*. Israel J. Math. (2015): 1–14.

B. Wilson, *On almost everywhere convergence of strong arithmetic means of Fourier series*, Trans. Amer. Math. Soc., **367** (2015), 1467-1500.

B. Wilson, *Sobolev Stability of plane wave solutions to the nonlinear Schrödinger equation*, Comm. in Partial Diff. Eqns., **40**, 8 (2015), 1521-1542.

M. Csörnyei, B. Wilson, *Tangents of σ -finite curves and scaled oscillation*, Math. Proc. Cambr. Phil. Soc., vol. 161, no. 1, (2014), 1–12.

Professional Activities

MIT Mathematics Diversity Committee (Spring 2016- Present)

Undergraduate Academic Advisor, MIT (Fall 2017-Spring 2018)

Morehouse College Mathematics Alumni Conference, Panel Speaker (2012, 2013, 2016)

Harmonic Analysis-Combinatorics Graduate Seminar, University of Chicago (Co-Organizer Fall 2012)

Miscellaneous

Citizenship: U.S. Citizen.