

WILLIAM ROBERSON-VICKERY

University of Illinois at Chicago
Mathematics, Statistics, and Computer Science
SEO 1311

William.Roberson.Vickery@gmail.com
WilliamRoberson-Vickery.com

ACADEMIC INTERESTS

My research is on stochastic differential equations and stochastic partial differential equations with particular focus on rough paths, regularity structures, Malliavin calculus, fractional Brownian motion, and the parabolic Anderson model for the stochastic heat equation.

EDUCATION

University of Illinois at Chicago

- Ph.D. in Mathematics (expected graduation: 2023).
- Advisor: Cheng Ouyang.

Stony Brook University

- B.S. in Mathematics, 2016.

PUBLICATIONS AND PREPRINTS

2. **Stochastic Heat Equation on the d -Dimensional Torus Driven by Spatially Colored Noise** (joint with Cheng Ouyang and Le Chen). In-Progress.
1. **Quasi-sure non-Self-intersection for Rough Differential Equations Driven by Fractional Brownian Motion** (joint with Cheng Ouyang). *Electron. Commun. Probab.* 27: 1-12 (2022).

CONFERENCE PRESENTATIONS

1. *Rough Paths and Rough Differential Equations: Almost-Sure and Quasi-sure Properties of Paths*. University of Wisconsin Madison, Graduate Student Probability Conference, September 10-11 2022.
1. *Rough Paths: an Introduction*. University of Ulm, Gradient Flows and Variational Methods in PDEs Winter School, November 25-29 2019.

TEACHING EXPERIENCE

University of Illinois at Chicago

- Teaching Assistant, Math 090 Introductory Algebra
- Teaching Assistant, Math 110 Introductory Algebra/Precalculus
- Teaching Assistant, Math 121 Precalculus (4 semesters)
- Teaching Assistant, Math 125 Linear Algebra for Business

¹Updated November 19, 2022

- Teaching Assistant, Math 180 Calculus I
- Teaching Assistant, Math 220 Differential Equations
- Teaching Assistant, Stat 101 Intro to Statistics (2 semesters)
- Teaching Assistant, MCS/CS 260 Intro to Programming (3 semesters).
- Teaching Assistant, MCS 360 Data Structures
- Teaching Assistant, MCS 401 Computer Algorithms (2 semesters)
- Grader, MCS 425 Intro to Mathematical Cryptography

ORGANIZATION

Conferences

- Co-organizer of *Chicago Area SIAM Student Conference (CASSC) 2019*. <https://sites.google.com/a/uic.edu/chicago-area-siam-student-conference-2019/>.

Social Activism

- Volunteer, Pilsen Alliance 2017-present.
- Precinct Captain, Byron Sigcho-Lopez Campaign 2019.
- co-Founder, Pilsen en Defensa 2017-2020
- co-Founder, Pilsen Solidarity Network 2020-present.