Meg Doucette

Mathematics Department
University of Chicago
5734 S. University Ave
Chicago, IL 60637 USA

mdoucette@uchicago.edu
https://math.uchicago.edu/~doucette/
+1 978-760-0018

Education

The University of Chicago, Chicago, IL

PhD in Mathematics 2018-present
Primary Advisor: Amie Wilkinson
Secondary Advisor: Danny Calegari
Expected Graduation, June 2024 2019

MS in Mathematics 2014-2018

BA in Mathematics with Honors

Publications

- "Smooth Models for Certain Fibered Partially Hyperbolic Systems". (2023) Ergodic *Theory and Dynamical Systems* (2023). DOI:10.1017/etds.2023.102
- "On a Very Steep Version of the Standard Map". (2016) with M. Arnold, T. Dauer, and S.-C. Wolf. *Experimental Mathematics*. DOI: 10.1080/10586458.2016.1226993

Awards

National Science Foundation, Graduate Research Fellowship 2018-2023

Paul R. Cohen Memorial Prize, University of Chicago 2018

Phi Beta Kappa, University of Chicago 2018

Teaching Experience

Graduate Student Lecturer, University of Chicago

- Math 112 (Studies in Mathematics I) Fall 2020
- Math 132 (Elementary Functions and Calculus II) Winter 2021
- Math 153 (Calculus III) Spring 2021
- Math 151 (Calculus I) Fall 2023
- Math 152 (Calculus II) Winter 2023

Teaching Assistant, University of Chicago

- Math 272 (Functional Analysis) Spring 2019
- Math 276 (Introduction to Dynamical Systems) Winter 2019
- Math 270 (Complex Analysis) Fall 2018
- Math 153 (Calculus III) Fall 2017
- Math 205 (Analysis III) Winter 2017
- Math 204 (Analysis II) Fall 2016

Grader, University of Chicago

- Math 273 (Ordinary Differential Equations) Winter 2018

Graduate Student Mentor, University of Chicago

- University of Chicago REU Summers 2018-2023

- University of Chicago Directed Reading Program — Winter, Spring 2020, Winter 2021, Spring 2022

Conferences, Workshops, and Talks

Midwest Dynamical Systems Conference, Chicago, IL — October, 2023
- Gave invited research talk

Beyond Uniform Hyperbolicity, Będlewo, Poland — April/May 2023
- Gave research talk

University of Chicago, Farb and Friends Student Seminar — January 2023
- Gave research talk

University of Chicago, Dynamics Seminar — November 2022
- Gave research talk

International Conference on Dynamical Systems, IMPA, Rio de Janeiro, Brazil — October 2022

Workshop on Low-Dimensional Topology and Homeomorphism Groups, Brin Mathematics Research Center, College Park, MD — September 2022
- Gave invited research talk

Conference on Groups, Geometry and Dynamics, Cargèse, France — June 2022

Workshop on Dynamical Systems and Related Topics, College Park, MD — April 2022
- Gave research talk

Flexibility and Rigidity in Dynamical Systems, Simons Center, Stonybrook, NY — March 2022
- Presented poster

Workshop/School on Stochastic PDEs, Mean Field Games and Biology at the Gran Sasso Science Institute, L'Aquila, Italy — Summer 2017

Chicago Summer School in Analysis, Chicago, IL — June 2017

Chicago Summer School in Analysis, Chicago, IL — June 2016

Joint Mathematics Meetings, Seattle, WA — January 2016
- Presented poster

Service

University of Chicago Math Department, Prospective Student Weekend — 2021
- Organized activities and informational sessions to introduce prospective graduate students to the UChicago Math Department.

University of Chicago REU, Apprentice Program, Chicago, IL — Summer 2019
- Prepared and delivered weeklong mini-course on Dynamical Systems.

Boot Camp in Analysis, Chicago, IL — Summer 2018
- Supervised TAs and students in courses in Dynamics, Partial Differential Equations, Complex Analysis, and Differential Geometry

Boot Camp in Analysis, Chicago, IL — Summer 2017
- Delivered lecture to undergraduate students in the Dynamics course in the Boot Camp in Analysis

Math Circles of Chicago, Chicago — Fall 2016

- Volunteered at Math Circles of Chicago. Worked with high school and middle school students to help them understand math concepts, solve problems, and foster interest in mathematics

Yellow Pig Day at Hampshire College Summer Studies in Mathematics, Amherst, MA — Summer 2015 (2 day event)

- Worked with high school students to help them understand math concepts and solve problems. Spoke on panel about pursuing math at the undergraduate and graduate level.

Girl's Angle Math Circle, Cambridge, MA — Fall 2013

- Worked with middle school students to help them understand math concepts, solve problems, and foster interest in mathematics

Other

Citizenship: USA
LaTeX, C++, Python, Mathematica
Languages: English (Native), French (Intermediate), Czech (Basic)