# Christopher Stith

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### **EDUCATION**

## University of Michigan, Ann Arbor

Ann Arbor, MI (September 2019 – Present)

- Ph.D. in Mathematics (Expected June 2024)
- Relevant coursework: Differential Manifolds, Advanced Partial Differential Equations: Nonlinear Wave Theory, Differential Geometry, Fourier Analysis: Introduction to Harmonic Analysis, Nonlinear Partial Differential Equations, Probability: Random Processes I, Directed Reading in Mathematical General Relativity

#### University of Chicago

Chicago, IL (September 2015 – June 2019)

- Bachelor of Science, Mathematics (with honors), GPA: 3.89/4.00
- Relevant coursework (\* denotes graduate courses): Analysis I-II-III\*, Literacy in Partial Differential Equations\*, Topology and Geometry III\*, General Relativity\*, Basic Theory of Partial Differential Equation, Introduction to Algebraic Topology, Honors Basic Algebra I-II-III, Point Set Topology, Basic Complex Variables, Introduction to Differentiable Manifolds, Honors Analysis I-II-III, Honors Calculus I-II-III

### RESEARCH INTERESTS

• Mathematical general relativity, partial differential equations, differential geometry, geometric analysis.

### **HONORS**

• Gabrielle & Sophie Rainich Fellowship (University of Michigan)

2020

• Dean's List (University of Chicago)

2015 - 2019

## SELECTED TALKS

- MCAIM Student Seminar (University of Michigan, 2020) The Cauchy problem for general relativity
- Student Analysis Seminar (University of Michigan, 2020) Optimal transport theory
- Student Analysis Seminar (University of Michigan, 2020) The Cauchy problem for general relativity

## ATTENDED CONFERENCES & WORKSHOPS

• Boston City Limits 2018 Summer School on Mathematical General Relativity and the Geometric Analysis of Waves of Fluids Massachusetts Institute of Technology

#### TEACHING/SERVICE

• Graduate Student Instructor (GSI) at University of Michigan, Ann Arbor

Math 216: Introduction to Differential Equations (Lab Instructor)

Math 116: Calculus II (Primary instructor)

Math 116: Calculus II (Primary instructor)

Math 115: Calculus I (Primary instructor)

Winter 2021 Fall 2020

Winter 2020

Fall 2019

• Co-organizer, Student Analysis Seminar

2021 - Present

# OTHER RELEVANT EXPERIENCE

- University of Chicago Analysis Bootcamp TA and Upper-Level Student, June August 2018
  - Attended lectures by André Neves on minimal surface theory, reading and presenting on research papers in the field
  - Supervised the lower-year Bootcamp; graded weekly problem sets, held weekly discussion sections, held supplemental lectures
- University of Chicago Analysis Bootcamp Student, June-August 2017
  - Summer school focused on complex analysis, dynamical systems, probability, and differential geometry, organized by Wilhelm Schlag.
- University of Chicago Mathematics REU, June-August 2016
  - Attended lectures on linear algebra, graph theory, and algebraic topology
  - Independent study of algebraic topology, culminating in expository paper on fundamental groups and covering spaces (available here)