

# Christopher Stith

Ann Arbor, MI  
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## EDUCATION

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### 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)
- 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

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

## HONORS

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- Gabrielle & Sophie Rainich Fellowship (University of Michigan) 2020
- Dean's List (University of Chicago) 2015 – 2019

## SELECTED TALKS

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- 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

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

## TEACHING/SERVICE

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- Graduate Student Instructor (GSI) at University of Michigan, Ann Arbor
  - Math 216: Introduction to Differential Equations (Lab Instructor) Winter 2021
  - Math 116: Calculus II (Primary instructor) Fall 2020
  - Math 116: Calculus II (Primary instructor) Winter 2020
  - Math 115: Calculus I (Primary instructor) Fall 2019
- Co-organizer, Student Analysis Seminar 2021 – Present

## OTHER RELEVANT EXPERIENCE

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- 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](#))