# Ben Lowe

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## Current position

Graduate Student in Mathematics.

## Areas of Specialization

Geometric Analysis and Hyperbolic Geometry

## Education

BA in Mathematics, University of Chicago. 2017. Phi Beta Kappa.

PhD in Mathematics, Princeton University. 2022 (Expected.) Advisor: Fernando Coda Marques.

## Papers

Minimal Surface Entropy and Average Area Ratio (with Andre Neves.) *arXiv:2110.09451*.

Beyond Almost Fuchsian Space (with Zeno Huang.) *https://arxiv.org/abs/2104.11284*.

Area, Scalar Curvature, and Hyperbolic 3-Manifolds. *https://arxiv.org/abs/2102.03660*.

Deformations of Totally Geodesic Foliations and Minimal Surfaces in Negatively Curved 3-Manifolds. Geometric and Functional Analysis Volume 31, pgs. 895–929 (2021). *https://arxiv.org/abs/2008.08651*.

## Talks

Midwest Dynamics Seminar, October 2020. (Zoom Seminar joint between Indiana, Michigan, Northwestern, University of Chicago)

Pangolin Seminar, December 2020. (Zoom seminar organized by Sébastien Alvarez (CMAT-Universidad de la República-Uruguay), François Fillastre (CY Cergy Paris University), Andrea Seppi (CNRS, France) and Graham Smith (Universidade Federal do Rio de Janeiro))

City University of New York Geometric Analysis Seminar, February 2021.

IMJ-PRG geometry seminar at Paris Diderot University, March 2021.

Duke Geometry Seminar, March 2021.

The Nearly Carbon Neutral Geometric Topology Conference, Hyperbolic Manifolds Section, June 2021.

Cornell Analysis Seminar, September 2021.

UChicago Geometric Analysis Seminar, November 2021.


## Teaching

Grader, University of Chicago. (2014-2017.)

Grader and Preceptor, Princeton University. (2018-present.) Have graded classes from 1st year Calculus to Upper-Level undergraduate courses in Geometry and Algebra.

Mentor at the University of Chicago REU. (Summer of 2017.) Supervised two undergraduate students who wrote expository papers in pure mathematics. One of the papers is at the following link: *http://math.uchicago.edu/ may/REU2017/REUPapers/Hummels.pdf*.