

MICHAEL B. LAW

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EDUCATION

Massachusetts Institute of Technology

2022–27 (*expected*)

Ph.D. Mathematics.

Research areas: Geometric analysis and partial differential equations.

Advisor: Prof. William P. Minicozzi II.

Australian National University

2021

Bachelor of Mathematical Sciences (Honors), GPA 7.00/7.00.

Thesis title: *Uniqueness of tangent flows in mean curvature flow*.

Advisor: Prof. Ben Andrews.

University of Melbourne

2020

Bachelor of Science (Mathematics & Statistics), weighted average 94/100.

PREPRINTS AND PUBLICATIONS

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1. *Drift-harmonic functions with polynomial growth on asymptotically paraboloidal manifolds*. Preprint, [arxiv:2501.05119](https://arxiv.org/abs/2501.05119).
 2. *Concavity for elliptic and parabolic equations in complex projective space* (with Shrey Aryan). Preprint, [arxiv:2403.16783](https://arxiv.org/abs/2403.16783).
 3. *Positive mass and Dirac operators on weighted manifolds and smooth metric measure spaces* (with Isaac M. Lopez and Daniel Santiago). *J. Geom. Phys.* **209**, No. 105386 (2025).

AWARDS AND HONORS

Croucher Scholarship for Doctoral Study, Croucher Foundation

2023–25

Hartley Rogers Jr. Prize, MIT

2023

Presidential Fellowship, MIT

2022–23

Dixson Prize, University of Melbourne

2020

Maurice H. Belz Prize, University of Melbourne

2019

TEACHING AND MENTORING

As tutorial (recitation) leader:

- Discrete Mathematical Models, Australian National University (ANU) Mar–Jun 2021, 22
- Advanced Analysis 1, ANU Feb–May 2022
- Mathematics and Applications 1, ANU Aug–Nov 2021

As research mentor:

- Research Science Institute, MIT Jul 2024
- Undergraduate Research Opportunities Program, MIT Jun–Aug 2024
- Summer Program in Undergraduate Research, MIT Jun–Aug 2023

As reading program mentor:

- Directed Reading Program, MIT Jan 2023, 24, 25

CONFERENCES ATTENDED

Challenges in Analysis and Geometry	<i>Jun 2024</i>
Séminaire de Mathématiques Supérieures	<i>Jun 2024</i>
Croucher Symposium	<i>Dec 2023</i>
Southern California Geometric Analysis Seminar	<i>Mar 2023</i>
Geometric Analysis Seminar for Boston Area Graduate Students	<i>Oct 2022</i>