

CASEY MASON LEE

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ACADEMIC INTERESTS

Combinatorics, Combinatorial Optimization, Graph theory, Geometric Tiling.

EDUCATION

- Ph.D., Mathematics, University of Pittsburgh, (expected: 2026)
Dissertation: *Tiling as an Integer Linear Programming Problem*
Advisor: Terry Antula
- M.S., Mathematics, University of Pittsburgh, 2023.
- B.S., Mathematics and Statistics, Duquesne University, 2020.

PUBLICATIONS

1. *Partial solutions of the Eternity tiling problem*. Submitted; available at departmental Technical Reports site. <https://www.mathematics.pitt.edu/research/technical-reports>
2. *A strategy for solving the Eternity tiling problem* (joint with Terry Antula). accepted, *Austrasian Journal of Typology*. <https://arxiv.org/abs/2308.16885>

TALKS

1. *A new formulation for tiling problems*. Combinatorics Conference, Kent State Mathematics, June 2022.
2. *Solving the T puzzle*. Combinatorics seminar, Pitt Mathematics Department, October 2021.

TEACHING

- Instructor, Calculus III (two semesters).
- Teaching Assistant, Introduction to Differential Equations (one semester).
- Grader, Calculus II (two semesters).

ACTIVITIES

- Co-organizer of *Discrete Geometry Seminar*, with Nunya Bidness (four semesters). [website](#).
- Member, American Mathematical Society
- Mathematics Graduate Student Organization, Vice President, two years
- Summer Internship at Oak Ridge National Laboratory, 2021

AWARDS

- Sarah Silverman Award, 2020

SKILLS

- Programming languages: Mathematica, MATLAB, Python.
- Actuarial exams: Probability, Financial Mathematics.