# Mara-Ioana Postolache

School of Mathematical Sciences Queen Mary University of London Mile End Road London E1 4NS

Email: mip32@cantab.ac.uk

Website: https://mipostolache.github.io/

Nationality: Romanian

Languages: Romanian (native), English (fluent), German (basic)

# **Current position**

*PhD Student*, School of Mathematical Sciences, Queen Mary University of London Supervised by Huy The Nguyen and Shengwen Wang.

# Areas of specialisation

Measures, Summer Research Festival

Geometric Analysis; Mean Curvature Flow; Minimal Surfaces

#### **Education**

Aug 2023

| 2025-NOW<br>2024-2025<br>2021-2024 | PHD, School of Mathematical Sciences, Queen Mary University of London MMATH (Distinction), Mathematical Tripos, University of Cambridge BA (Upper Second Class Honours), Mathematical Tripos, University of Cambridge |
|------------------------------------|---|
|                                    | Publications & talks  |
|                                    | Pre-prints  |
| 2024                               | "Hénon maps with many rational periodic points" (with Hyeonggeun Kim, Holly Krieger, and Vivian Szeto), https://arxiv.org/abs/2412.01668  |
|                                    | TALKS   |
| Mar 2025                           | Otto Calculus and Gradient Flows on the Manifold of Probability Measures, Tomorrow's Mathematicians Today Conference  |
| DEC 2024                           | An Introduction to Mean Curvature Flow, Part III Seminar Series   |
| ОСТ 2024                           | Otto Calculus and Gradient Flows on the Infinite-Dimensional Manifold of Probability  |

The X-Ray Transform and Geometric Inverse Problems, Archimedeans Talks Polynomials with many Rational Preperiodic Points, CMP Presentation Day

# **Other Academic**

#### PART III ESSAY

2025 Manifolds with Non-negative Scalar Curvature, supervised by Paul Minter

#### RESEARCH PROJECTS

2024 Infinite-dimensional geometry of diffusions, supervised by Clément Mouhot and Amélie Loher

2023 *Polynomials with many rational preperiodic points*, group project with Hyeonggeun Kim and Vivian Szeto, supervised by Holly Krieger

Last updated: October 17, 2025