Laura Flower

[FirstName].[LastName]@warwick.ac.uk

Last updated: November 2026

Research interests

Geometric analysis. Currently working on uniqueness of Ricci flows from certain types of limit spaces, and maximum principles for Ricci flow.

Education

PhD student at the Universiy of Warwick — 2023-ongoing
Supervisors: Prof. Felix Schulze, Prof. Peter Topping

MMath Mathematics at the University of Oxford — 2019-2023
Ranked 2^{nd} in year group

Publications

A sharp local maximum principle for Ricci flow — November 2026
In preparation, anticipated November 2026

Uniqueness of Ricci flows from singular initial data — November 2026
Joint with M.-C. Lee and F. Schulze; Preprint, arXiv:2611.06814

On the uniqueness of Ricci flows from certain Alexandrov spaces — October 2026
Preprint, arXiv:2610.03129

Talks

Analysis Graduate Colloquium, ETH Zürich — March 2027
Uniqueness of Ricci flows from singular initial data

Yorkshire-Durham Geometry Day — December 2026
Uniqueness of Ricci flows from singular initial data

Analysis seminar, University of Birmingham — November 2026
Uniqueness of Ricci flows from singular initial data

BRIJGACS seminar, University of Bristol — October 2026
The maximum principle (my favourite theorem)

Geometric analysis seminar, Freie Universität Berlin — June 2026
On uniqueness of the Ricci flow from Reifenberg Alexandrov spaces

Geometric analysis seminar, Otto-von-Guericke-Universität Magdeburg — June 2026
On uniqueness of the Ricci flow from Reifenberg Alexandrov spaces

Junior geometry seminar, University of Oxford — February 2026
On uniqueness of the Ricci flow from Reifenberg Alexandrov spaces

Undergraduate mathematics society, University of Warwick — January 2026
The maximum principle (my favourite theorem)

Junior analysis seminar, University of Warwick — October 2025
A sharp local maximum principle for Ricci flow

Postgraduate seminar, University of Warwick — October 2025
The maximum principle (my favourite theorem)

Postgraduate seminar, University of Warwick — November 2023
If I made a list of every doughnut, would it be compact?

Geometric analysis reading group, University of Warwick — 2023-ongoing
Various topics

Conferences

Women in Number Theory and Geometry (Cheltenham) — April 2026
Gave contributed talk

ICMS winter school: PDE in geometry and analysis (Edinburgh) — December 2025

British Isles Graduate Workshop VI: Minimal surfaces (Isle of Wight) — September 2025
Gave lightning talk

Talking Maths in Public (Warwick) — August 2025
Exhibitor (mathematical art)

Topics in Geometric Analysis conference (Pisa) — June 2025
Poster presented

ICMS Conference on Geometric moduli spaces (Edinburgh) — May 2025

Diversity and Decolonisation in Mathematics (Warwick) — April 2025

Third Meeting of the UK Metric Geometry and Analysis network (Oxford) — April 2025

LMS Summer school on Curvature flows and PDE (Cardiff) — July 2024

European School of Differential Geometry (Granada) — June 2024

LMS Undergraduate Summer School (Edinburgh) — August 2022

Teaching and outreach

Teaching assistant at Warwick Mathematics Institute — 2023-ongoing
Functional Analysis I/II, Theory of PDEs, First year supervisor

Volunteer with UK Maths Trust — 2020-ongoing
Mentoring scheme, summer school volunteer / pastoral lead, creating resources for schools

Access ambassador at Trinity College, Oxford — 2019-23
College tours and Q&As; targeting students from underprivileged schools and communities

Assorted tutoring, school visits, and mathematical outreach — 2016-20
Including: individual tutoring; lesson planning and delivery; class support; video production
For a range of ages and abilities

Committees and similar

Co-founder and co-organiser of "Girls in Geometric Analysis" network — 2026-ongoing

Staff – Graduate Student Liaison Committee — 2023-ongoing
Warwick Mathematics Institute. Events officer; year group representative

Warwick Mathematics Institute Teaching Committee — 2024

Prizes, scholarships, and grants

Graduate Teaching Assistant Teaching Prize — 2025
Warwick Mathematics Institute

LMS ECR Travel Grant — 2024

Gibbs Dissertation Prize — 2023
Oxford Mathematical Institute - joint best Part C dissertation in year group

Junior Mathematical Prize — 2023
Oxford Mathematical Institute - exam performance
The only student to win multiple Mathematical Institute prizes in 2023

Henniker Scholarship — 2021-22, 2022-23
Trinity College, Oxford - academic achievement

Stirling Boyd Prize — 2022

Trinity College, Oxford - academic achievement, contributions to college life

Henniker Exhibition 2020-21

Trinity College, Oxford - academic achievement

Essays

Dissertation: On the regularity for elliptic equations and systems 2022-23

Supervisor: Prof. Luc Nguyen

Extended essay: How 'big' is the moduli space of Riemann surfaces? 2021-22

Supervisor: Prof. Jason Lotay