

Alexia Corradini

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I am a third year PhD Student at the University of Cambridge, working in the field of symplectic topology with Prof. Ivan Smith. My research involves using tools from algebraic geometry and mirror symmetry to understand Lagrangians in symplectic manifolds. Very broadly, I am passionate about geometry and mathematical physics.

Education

2023-current	PhD student in Mathematics at the University of Cambridge, supervised by Prof. Ivan Smith
2023	Master's thesis on Seiberg-Witten theory supervised by Joel Fine at <i>Université Libre de Bruxelles</i>
2022-2023	M2 in Analysis, Arithmetic and Geometry at <i>Université Paris-Saclay</i>
2022	Research student at the University of Cambridge, supervised by Dr. Ruadháí Dervan (Spring/Summer)
2021-2022	M1 Mathematics (Jacques Hadamard programme) at <i>Ecole Polytechnique</i>
2018-2021	BSc in Mathematics at <i>Université Libre de Bruxelles</i> - high honours
2018-2021	BSc in Physics at <i>Université Libre de Bruxelles</i> - high honours

Papers & preprints

2025	Algebraic Lagrangian cobordisms, flux and the Lagrangian Ceresa cycle. , published in <i>Journal für die reine und angewandte Mathematik (Crelle's Journal)</i> .
2022	Equivariant localisation in the theory of Z-stability for Kähler manifolds. Published in <i>International Journal of Mathematics</i> .

Talks

18/06/2026	"A Lagrangian cycle theory" - Algebraic geometry seminar, Institut de Mathématiques de Jussieu
25/03/2026	"A Lagrangian cycle theory" - Conference: Floer theory beyond Floer, University of Cambridge
13/05/2025	"Towards a Lagrangian cycle theory: the Lagrangian Ceresa cycle" - Algebraic geometry seminar, University of Cambridge
15/10/2025	"The Lagrangian Ceresa cycle" - EDGE seminar, University of Edinburgh
13/05/2025	"The Lagrangian Ceresa cycle" - Algebraic geometry seminar, University of Glasgow
28/04/2025	"The Lagrangian Ceresa cycle" - MAGIC seminar, Imperial College London
24/04/2025	"Algebraic Lagrangian cobordisms" - Syzygies and mirror symmetry virtual seminar
11/04/2025	"The Lagrangian Ceresa cycle" - Symplectic Zoominar
21/03/2025	Expository talk on the paper Generating the Fukaya category for Hamiltonian G-manifolds by Evans–Lekili at the European Kylerec workshop in Uppdal, Norway
07/03/2025	"Holomorphic curve theory and the topology of Lagrangians" - Junior geometry seminar, Imperial College London
29/04/2024	Expository talk on <i>Flow categories</i> at the Spring School on Floer homotopy theory in Pont-sur-Yonne, France
11/08/2022	"Equivariant localization in the theory of Z -stability and Z -critical metrics" - Cambridge complex geometry afternoon, University of Cambridge
17/06/2022	"Localization theorems in Kähler geometry" - Junior Geometry Seminar, University of Cambridge

Events organised

- July 2025 Together with Danil Koževnikov, I organised a [summer school on partially wrapped Fukaya categories](#) which took place in Helmsley, UK and was mentored by Sheel Ganatra and Jeff Hicks. We hosted 29 participants - mainly PhD students or early career postdocs.
- 2024-2025 Together with Adrian Dawid, we organised an internal [A-side seminar](#) over three terms, bringing together the symplectic group at the University of Cambridge, offering opportunities for members to present original research, or discuss an interesting paper.

Awards & Prizes

- 2023 [Junior Maryam Mirzakhani prize - Fondation Mathématique Jacques Hadamard](#)
- 2022 Research Internship Prize - *Ecole Polytechnique*

Teaching

- 2024-2025 University of Cambridge - Supervisor for Part II *Algebraic topology*
- 2023-2024 University of Cambridge - Supervisor for Part II *Algebraic Topology*
- 2023-2024 University of Cambridge - Supervisor for Part II *Riemann surfaces*
- 2022-2023 Ecole Polytechnique - Tutor for first year analysis

Last updated: July 23, 2026