

# Navid Nabijou

Office MB-123  
School of Mathematical Sciences  
Queen Mary University of London  
Mile End Road, London E1 4NS  
United Kingdom

n.nabijou@qmul.ac.uk  
navidnabijou.com

Citizenship: British and Canadian  
Birth year: 1991

## 1 Biography

### *Research Interests*

Algebraic geometry. Moduli spaces and enumerative invariants. Logarithmic and orbifold structures. Combinatorial and tropical geometry.

### *Employment*

- 2022– Queen Mary University of London  
Lecturer (Assistant Professor)
- 2020–2022 University of Cambridge  
Herchel Smith Postdoctoral Research Fellow
- 2020–2022 St John’s College Cambridge  
Research Associate
- 2018–2020 University of Glasgow  
Research Associate (Mentor: Professor Michael Wemyss)

### *Education*

- 2014–2018 Imperial College London  
PhD in Mathematics (Supervisor: Professor Tom Coates)
- 2010–2014 Imperial College London  
MSci (incorporating BSc) in Mathematics  
First class honours. Ranked first in year.

## 2 Research

### *Selected Publications/Preprints*

- Feb 2024 *Logarithmic negative tangency and root stacks*  
with Luca Battistella and Dhruv Ranganathan  
**Journal of the European Mathematical Society (JEMS)**, to appear  
arxiv:2402.08014
- Mar 2022 *Gromov–Witten theory via roots and logarithms*  
with Luca Battistella and Dhruv Ranganathan  
**Geometry & Topology**, vol. 28, no. 7 (2024)  
arxiv:2203.17224
- Jul 2020 *Tangent curves to degenerating hypersurfaces*  
with Lawrence Jack Barrott  
**Journal für die reine und angewandte Mathematik (Crelle’s Journal)**, vol. 2022, no. 793 (2022)  
arxiv:2007.05016

*All Publications/Preprints*

All arXiv preprints submitted for publication.

- Jan 2026 *Counting point configurations in projective space*  
with Alex Fink and Rob Silversmith  
arxiv:2601.15421
- Feb 2025 *Euler characteristics of higher rank double ramification loci in genus one*  
with Luca Battistella  
**Annali della Scuola Normale Superiore di Pisa, Classe di Scienze**, to appear  
arxiv:2502.12281
- Nov 2024 *Chow theory of toric variety bundles*  
with Francesca Carocci and Leonid Monin  
**International Mathematics Research Notices (IMRN)**, vol. 2026, no. 1 (2026)  
arxiv:2411.16883
- Feb 2024 *Logarithmic negative tangency and root stacks*  
with Luca Battistella and Dhruv Ranganathan  
**Journal of the European Mathematical Society (JEMS)**, to appear  
arxiv:2402.08014
- Oct 2023 *Gromov–Witten theory of bicyclic pairs*  
with Michel van Garrel and Yannik Schuler  
**Transactions of the AMS**, online first  
arxiv:2310.06058
- Jun 2023 *Toric configuration spaces: the bipermutahedron and beyond*  
**Mathematische Zeitschrift**, vol. 308, no. 57 (2024)  
arxiv:2306.03215
- Nov 2022 *Universality for tropical and logarithmic maps*  
with Gabriel Corrigan and Dan Simms  
**Épjournal de Géométrie Algébrique (EPIGA)**, vol. 8, no. 13 (2024)  
arxiv:2211.15719
- Sep 2022 *Divisors and curves on logarithmic mapping spaces*  
with Patrick Kennedy-Hunt, Qaasim Shafi, and Wanlong Zheng  
**Selecta Mathematica**, vol. 30, no. 75 (2024)  
arxiv:2209.00630
- Jul 2022 *Tropical expansions and toric variety bundles*  
with Francesca Carocci  
**Manuscripta Mathematica**, vol. 177, no. 3 (2026)  
arxiv:2207.12541
- Mar 2022 *Gromov–Witten theory via roots and logarithms*  
with Luca Battistella and Dhruv Ranganathan  
**Geometry & Topology**, vol. 28, no. 7 (2024)  
arxiv:2203.17224
- Sep 2021 *GV and GW invariants via the enhanced movable cone*  
with Michael Wemyss  
**Moduli**, vol. 1, e8 (2024)  
arxiv:2109.13289
- Sep 2021 *Rubber tori in the boundary of expanded stable maps*  
with Francesca Carocci  
**Journal of the London Mathematical Society**, vol. 109, no. 3 (2024)  
arxiv:2109.07512

- Mar 2021 *The local-orbifold correspondence for simple normal crossings pairs*  
with Luca Battistella, Hsian-Hua Tseng, and Fenglong You  
**Journal of the Institute of Mathematics of Jussieu**, vol. 22, no. 5 (2023)  
arxiv:2103.09299
- Jul 2020 *Tangent curves to degenerating hypersurfaces*  
with Lawrence Jack Barrott  
**Journal für die reine und angewandte Mathematik (Crelle's Journal)**, vol. 2022, no. 793 (2022)  
arxiv:2007.05016
- Aug 2019 *Gromov–Witten theory with maximal contacts*  
with Dhruv Ranganathan  
**Forum of Mathematics, Sigma**, vol. 10, e5 (2022)  
arxiv:1908.04706
- Jul 2019 *Curve counting in genus one: elliptic singularities and relative geometry*  
with Luca Battistella and Dhruv Ranganathan  
**Algebraic Geometry**, vol. 8, no. 6 (2021)  
arxiv:1907.00024
- Apr 2018 *The fundamental solution matrix and relative stable maps*  
**European Journal of Mathematics**, vol. 5, no. 3 (2019)  
arxiv:1804.00678
- Oct 2017 *Relative quasimaps and mirror formulae*  
with Luca Battistella  
**International Mathematics Research Notices (IMRN)**, vol. 2021, no. 10 (2021)  
arxiv:1710.11158
- Dec 2013 *Mutations of fake weighted projective spaces*  
with Tom Coates, Samuel Gonshaw, and Alexander Kasprzyk  
**Electronic Journal of Combinatorics**, vol. 21, no. 4 (2014)  
arxiv:1312.0921

### Invited Lecture Series

- Sep 2019 Mini-course: *Moduli Spaces of Curves and Hurwitz Theory*  
Summer School Around Moduli Spaces, University of Saarland

### Conference Grants

- 2024– *COW and CALF Algebraic Geometry Seminars*  
LMS (£1500 x2), Heilbronn (£1050)
- Apr 2024 *Facets of Algebraic Geometry* at QMUL  
LMS Celebrating New Appointments (£500), QMUL Matching Funds (£500)
- Sep 2023 *A Tropical Panorama* at Trinity College Dublin  
Hamilton Mathematics Institute (€6000), Foundation Compositio (€2500)  
with Marvin Anas Hahn
- Sep 2022 *COMB in CAMB* at the University of Cambridge  
LMS (£5500), Foundation Compositio (€5000), Heilbronn (£3000)  
with Luca Battistella
- Apr 2022 Research in Groups, ICMS, Edinburgh  
with Luca Battistella and Dhruv Ranganathan
- Apr 2019 Research in Pairs, MFO, Oberwolfach  
with Luca Battistella

*PhD Students***Current**

Cat Rust (2023-2027)

Dan Simms (2023-2027)

Andy Yang (2024-2028)

**Graduated**

Robert Crumplin (2020-2024) (with Alessio Corti)

### 3 Service

*Mathematical Community*

Recommendation letters: postdoctoral (5), PhD (7), undergraduate (9)

Regular reports and quick opinions for leading journals

Reviews for MathSciNet

Panel member for LMS discussion on the academic job market

*University Administration*

- 2026– Programme Level Assessment (PLA) Coordinator, QMUL School of Mathematical Sciences
- 2024–2025 Year 1 Education Leader, QMUL School of Mathematical Sciences
- 2023–2025 Deputy EDI Lead, QMUL School of Mathematical Sciences
- 2022–2025 Advisory Board (Early-Career), UK Academy for the Mathematical Sciences
- 2022–2024 Co-lead, EDI Ethnic Minorities Group, QMUL School of Mathematical Sciences
- 2020–2021 Undergraduate admissions at St John's College, Cambridge  
Interviewing ~50 applicants, participating in decision meetings and producing interview reports

*Seminar and Conference Organisation*

- 2024– COW Algebraic Geometry Seminar
- 2023– QMUL Algebra and Number Theory Seminar
- 2022– QMUL Mathematics Internal Colloquium
- 2024 Facets of Algebraic Geometry Conference at QMUL
- 2023 A Tropical Panorama Workshop in Dublin
- 2022 COMB in CAMB Summer School in Cambridge
- 2021–2022 Guided Meditations in Logarithmic Gromov–Witten Theory (founder)
- 2021 Cambridge Algebraic Geometry Group Meeting
- 2015–2016 Imperial College Junior Geometry Seminar

2012–2013 Imperial College Undergraduate Mathematics Colloquium (co-founder)

### *Examining*

3 internal PhD examinations at QMUL

2 external master's dissertation examinations at EPFL, Cambridge

## 4 Teaching

### *Lecture Courses*

- 2023, 2024, 2025 Convergence and Continuity, Queen Mary University of London  
Course head and lecturer, undergraduate course: 55 hours
- 2023, 2024, 2025 Further Topics in Algebra, Queen Mary University of London  
Course head and lecturer, master's course: 34 hours
- 2022 Toric Geometry (Part III), University of Cambridge  
Course head and lecturer, master's course: 29 hours
- 2019 Groups, Rings and Modules, SMSTC  
Course head and lecturer, second half of graduate course (video-conferenced to 8 Scottish universities): 10 hours
- 2019 Galois Theory (4H), University of Glasgow  
Course head and lecturer, final-year undergraduate course: 29 hours

### *Mentoring, Supervisions, Tutorials*

- 2022– Academic and pastoral advisor for ~15 undergraduate students per year  
Queen Mary University of London
- 2025 Supervisor for MSc Data Analytics dissertations  
Queen Mary University of London
- 2025 Supervisor for *Count Me In* undergraduate summer research programme  
University of Edinburgh
- 2022 Setter and assessor of Part III essay (title: *Moduli of Curves*)  
University of Cambridge
- 2020–2022 Tutor (“supervisor”) for numerous undergraduate courses  
St John's College, Cambridge
- 2021, 2022 Supervisor for undergraduate summer research projects  
University of Cambridge
- 2018–2019 Supervisor for master's dissertation (title: *Hurwitz theory*)  
University of Glasgow
- 2014–2018 Teaching assistant for numerous undergraduate courses  
Imperial College London
- 2013–2014 Academic mentor for first-year undergraduates  
Imperial College London

## Public Engagement

### Talks

- Feb 2025 Undergraduate Research Seminar, Queen Mary University of London
- Jun 2024 Count Me In, University of Edinburgh
- Apr 2024 Mathematics and Statistics Awareness Month, Northeastern University London
- Jul 2023 Undergraduate Summer Research Colloquium, University of Cambridge

### Classes

- Jul 2022 *Symmetry: the world through the eyes of a mathematician.*  
Interactive class delivered as part of the Intro to Maths at Uni programme, encouraging students from under-represented ethnic backgrounds to apply to study mathematics at selective universities.
- Nov 2021 *The colourful world of graphs: from bridges to borders.*  
Interactive course delivered as part of London Maths Outreach; four lessons at Harris Academy, St John's Wood, spread across four weeks.
- Nov 2015 *Polyhedra and Symmetry.*  
Interactive class delivered at Kendrick School, Reading, via the outreach office at Imperial College London.

## Teaching Qualifications

- 2025– Fellow of the Higher Education Academy (FHEA)
- 2022–2025 Postgraduate Certificate in Academic Practice (PGCAP)  
4-module taught course at Queen Mary Academy, accredited by Advance HE  
Distinction received in every component of assessment

## 5 Research Talks

- May 2026 Séminaire de Géométrie Énumérative, IMJ-PRG
- May 2026 Séminaire de Géométrie Complexe, Université de Toulouse
- Apr 2026 Geometry of Curves and Moduli, University of St Andrews
- Mar 2026 Algebraic Geometry Seminar, University of Cambridge
- Mar 2026 Workshop on Configuration Spaces, University of Vienna
- Feb 2026 Moduli in Heidelberg, Heidelberg University
- Nov 2025 Algebraic and Symplectic Geometry Seminar, University of Oxford
- Sep 2025 CAGE 2025, Leiden University
- Sep 2025 BrAG VII, University of Nottingham
- Jun 2025 Geometry Seminar, University of Rome Tor Vergata
- Apr 2025 Pure Mathematics Colloquium, University of St Andrews
- Jan 2025 London Institute for Mathematical Sciences
- Jul 2024 Logarithmic Moduli Theory, University of Cambridge

- Jul 2024 *Moduli* Journal Launch, Simons Center, Stony Brook
- Jul 2024 LMS Invited Lectures, Imperial College London
- May 2024 COW Seminar, University of Liverpool
- Apr 2024 Facets of Algebraic Geometry, QMUL
- Apr 2024 Algebraic Geometry Seminar, Academia Sinica
- Mar 2024 Enumerative Geometry and Arithmetic, Lorenz Center, Leiden
- Feb 2024 Geometry & Topology Seminar, Imperial College London
- Jan 2024 Internal School Colloquium, QMUL
- Aug 2023 Curves: Algebraic, Tropical and Logarithmic, BIRS
- Apr 2023 Groups, Arithmetic and Algebraic Geometry Seminar, EPFL
- Mar 2023 Geometry Seminar, Trinity College Dublin
- Feb 2023 Tropical Geometry and Combinatorics Seminar, QMUL
- Feb 2023 RéGA Seminar, Institut Henri Poincaré, Paris
- Feb 2023 Tropical Geometry in Frankfurt (TGIF), University of Frankfurt
- Jan 2023 Structures in Enumerative Geometry, University of Sheffield
- Nov 2022 Algebraic and Arithmetic Geometry Seminar, University of Utrecht
- Nov 2022 Algebra and Number Theory Seminar, QMUL
- Jun 2022 Sheffield Geometry and Physics Seminar, University of Sheffield
- May 2022 Intercontinental Moduli and Algebraic Geometry Zoominar
- Apr 2022 Algebraic Geometry Seminar, University of Glasgow
- Jan 2022 Algebraic Geometry Seminar, University of Cambridge
- Dec 2021 Online Workshop on Mirror Symmetry, Kyoto University
- Nov 2021 Geometric Representation Seminar, YMSC, Tsinghua University
- Nov 2021 Freemath Seminar, Lancaster/Cambridge/Imperial College
- Oct 2021 Non-Archimedean and Tropical Geometry, Goethe University Frankfurt
- May 2021 Weekly Geometry Seminar, KIAS
- Feb 2021 Subdivisions Seminar, University of Bonn
- Oct 2020 Fanosearch Group Meeting, Imperial College London
- Sep 2020 Online Algebraic Geometry Seminar, University of Nottingham
- Feb 2020 Physical Mathematics Seminar, University of Heidelberg
- Feb 2020 Algebraic Geometry Seminar, University of Liverpool

- Dec 2019 Edinburgh Geometry Seminar (EDGE), University of Edinburgh
- Nov 2019 Algebraic Geometry Seminar, University of Warwick
- Oct 2019 Number Theory and Algebraic Geometry Seminar, Boston College
- Jul 2019 Workshop on Mirror Symmetry and Cluster Algebras (5CinG), University of Cambridge
- Jul 2019 Geometry and Mathematical Physics Seminar, University of Birmingham
- Jun 2019 Workshop: Logarithmic Enumerative Geometry and Mirror Symmetry, MFO, Oberwolfach
- Apr 2019 British Mathematics Colloquium, University of Lancaster
- Mar 2019 COW Seminar, University of Birmingham
- Feb 2019 Geometry and Topology Seminar, University of Glasgow
- Dec 2018 NCTS Seminar on Algebraic Geometry, National Taiwan University
- Oct 2018 KCL/UCL Junior Geometry Seminar, University College London
- Aug 2018 Workshop on Degenerate Contributions to Enumerative Invariants, Imperial College London
- May 2018 Algebraic Geometry Seminar, Oxford University
- May 2018 MAGIC Seminar, Imperial College London
- May 2018 Front Range Algebraic Geometry Seminar, Colorado State University
- Apr 2018 Séminaire de Géométrie Algébrique, Université d'Angers
- Mar 2018 Structures in Enumerative Geometry (Poster Session), MSRI Berkeley
- Feb 2018 London Geometry and Topology Seminar, Imperial College London
- Feb 2018 Warwick Algebraic Geometry Seminar, University of Warwick
- Nov 2017 Edinburgh Geometry Seminar (EDGE), University of Edinburgh
- Nov 2017 Mirror Symmetry Days, University of Kent
- Feb 2016 Symplectic Cut Seminar, King's College London
- Oct 2015 Symplectic Cut Seminar, King's College London
- Jan 2015 Junior Geometry Seminar, Imperial College London
- Nov 2013 Undergraduate Mathematics Colloquium, Imperial College London

## 6 Other

### *Prizes*

- 2025 PGR Supervisor of the Year  
Awarded by the QMUL Student Union for the best PhD supervisor across the university
- 2014 Governors' MSci Prize in Mathematics (£250)  
Awarded by Imperial College London to the highest-ranked MSci student in the final examinations
- 2014 Lance Ware Mensa Award (£300)  
Awarded by Imperial College London for academic excellence to a student of mathematics, biochemistry or medicine

- 2013 Gloucester Research (G-Research) Prize (£100)  
Awarded by Imperial College London for exceptional third-year exam results
- 2012 Gloucester Research (G-Research) Prize (£100)  
Awarded by Imperial College London for exceptional second-year exam results
- 2008 Senior UK Mathematics Challenge  
Gold Award and advancement to Round 1 of BMO

### *Expository Articles*

- Apr 2015 *Virtual Fundamental Classes in Gromov–Witten Theory*  
Supervisor: Dr Cristina Manolache
- Jun 2014 *Homotopy Groups of the Spheres*  
Supervisor: Professor Richard Thomas

### *Other Research Experience*

- 2013 Summer Research Assistant, Fanosearch Group, Imperial College London  
Supervisors: Professor Tom Coates and Dr Alexander Kasprzyk

### *Membership of Professional Associations*

London Mathematical Society (LMS)

### *Languages*

English Native  
French Intermediate