Laura Monk

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▬▬▬ Education

2018 – 21   **PhD in Mathematics** under the supervision of Nalini Anantharaman, *University of Strasbourg, Institut de Recherche Mathématique Avancée.*
The spectrum of random hyperbolic surfaces of high genus

2014 – 18   **École Normale Supérieure**, *Paris.*

2017 – 18   **Master's degree in Mathematics** (with honours), *Paris-Sud University.*

2017   **Agrégation of Mathematics** (7th place).
Secondary-school and University Teaching degree

2014 – 15   **Bachelor's degrees** in Mathematics and in Physics (with honours), *Paris-Sud University.*

2012 – 14   **Preparatory class** in Mathematics and Physics, *Lycée Privé Sainte Geneviève, Versailles (France).*

▬▬▬ Publications and preprints

2020   L. Monk, J. Thomas, *The tangle-free hypothesis on random hyperbolic surfaces*, submitted.

2020   L. Monk, *Benjamini-Schramm convergence and spectrum of random hyperbolic surfaces of high genus*, submitted.

2017   J.B. Fouvry, C. Pichon, P. Chavanis, L. Monk, *Resonant thickening of self-gravitating discs: imposed or self-induced orbital diffusion in the tightly wound limit*, Monthly Notices of the Royal Astronomical Society.

▬▬▬ Awards and grants

2019   Best Poster in Mathematics price from the Doctoral School, *École Doctorale MSII, Strasbourg (France).*

2018 – 21   PhD grant from the ENS Ulm.

2014 – 18   Full scholarship at the ENS Ulm.

Conferences and seminars

12/20   Oberseminar Differentialgeometrie (online), *Max Planck Institute for Mathematics, Bonn (Germany)*.

12/20   Young researchers conference "Jeunes géomètres dynamiques", *GdR Platon, Institut de recherche mathématique de Rennes (France)*.

12/20   Geometry seminar, *Université de Nantes (France)*.

11/20   Probability seminar, *Université Paris-Saclay (France)*.

11/20   Geometry seminar (online), *University of Leeds (UK)*.

10/20   Seminar "Billiards and Surfaces à la Teichmüller and Riemann" (online).

06/20   Analysis informal seminar (online), *Cardiff University (UK)*.

05/20   Geometrical Analysis seminar (online), *organised by Frédéric Naud*.

11/19   8th Strasbourg / Zurich Meeting: Frontiers in Analysis and Probability, *University of Zurich (Switzerland)*.

05/19   Seminar "Théorie spectrale et Géométrie", *Institut Fourier, Grenoble (France)*.

05/19   Workshop STROM : Spectral Theory and pRObability in Mathematical physics, *IRMA, Strasbourg (France)*.

04/19   Workshop Dynamics of geodesic flows and applications to PDEs, *ANR ISDEEC, École Polytechnique, Palaiseau (France)*.

04/19   Poster session at the SMF research school "Du quantique au classique", *CIRM, Marseille (France)*.

19   Reading seminar on Weil-Petersson volumes and Mirzakhani's recursion formula, with Federica Fanoni and Yohann Bouilly (organization + two talks), *IRMA, Strasbourg (France)*.

10/18   Analysis seminar, *IRMA, Strasbourg (France)*.

Teaching

2020 – 21   **Lecturer**, *University of Strasbourg (France)*, analysis - 2nd year.

2018 – 21   **Teaching assistant**, *University of Strasbourg (France)*.
- analysis - 2nd year in computer science
- differential equations - 3rd year
- written, oral exams, individual tutoring for the preparation of the agrégation
- oral exams in analysis - 1st and 2nd year
- mathematical circle (math club for high-school students)

2017 – 18   **Tutoring class**.

1st year of economic, social and legal sciences, CPES, Paris.

2014 – 18   **Oral examiner in preparatory schools**, *MPSI, MP*, HK B/L*.

Sainte-Geneviève (Versailles), Fénelon Sainte-Marie and Henri IV (Paris).

Other activities

2018 and 19   **Organization of the RJM**, *University of Strasbourg.*

Three-day meeting for high school girls to conduct mathematical group activities, meet female researchers and engineers and speak about gender issues.

2017   **Jury for the TFJM^2**.

Conference-like mathematical competition for high-school students.

2017   **Outreach talk** for undergraduates, *Lycée Privé Sainte-Geneviève.*

2015   **Arts Students' Union**, *École Normale Supérieure.*

Skills

Languages   French (mother tongue), English (fluent), Spanish (basic).

Programming   C, Caml, LaTeX, Maple, Mathematica, Python.