

CURRICULUM VITAE

NOLWENN LE QUELLEC

Email: nolwenn.le_quellec@ens-lyon.fr
ORCID: [0009-0007-1148-7044](https://orcid.org/0009-0007-1148-7044)
Webpage: <https://nolwenn-le-quellec.deuxfleurs.eu/indexEN.html>

Employement.

September 2026 - August 2027 Postdoc with Professor Camille Horbez apart of the research project "Artin groups, mapping class groups and $Out(F_n)$: from geometry to operator algebras via measure equivalence" at ENS Lyon.

Education.

- September 2023 - August 2026 • PhD in mathematics at Université Gustave Eiffel under the supervision of Federica Fanoni, Stéphane Sabourau and Alfredo Hubard. Successfully defended on June 18th 2026.
- September 2021 - June 2023 • Master in Mathematics, Algebra and Geometry cursus, at Université de Rennes.
• April - June 2023 Internship under the supervision of Federica Fanoni and Stéphane Sabourau on the subject of the orthospectrum.
• Seminar under the supervision of San Vũ Ngọc on the subject of the WKB approximation.
• Research project with Clément Dubois under the supervision of Bert Wiest on the subject of quasi-geodesics in Gromov-hyperbolic spaces.
- September 2018 - June 2021 • Bachelor in Mathematics and Physics at Université Paris-Saclay.
• May - June 2021 Internship under the supervision of Anne Vaugon on the subject of the fundamental group and the Theorem of Van Kampen.

Research Interest. My research interests lie in hyperbolic geometry, in particular in finite- and infinite-type hyperbolic surfaces, but also in topology and geometric group theory. Specifically, I study problems related to the orthospectrum rigidity, spectrum rigidity, the parabolicity of infinite-type hyperbolic surfaces and big mapping class groups. I am currently working on graph products of groups and I am also curious about dynamics aspect and links with my research.

Pre-print.

- L. Battista, N. Le Quellec and J. Souto. A Theorem of Wolpert, and some Variations. *arXiv e-prints*, page arXiv:2607.12977, July 2026. *Submitted*
- E. Gordillo and N. Le Quellec. Ergodic geodesic flows and first kind flute surfaces. *arXiv e-prints*, page arXiv:2510.24576, October 2025. *Submitted*
- N. Le Quellec. Orthospectrum and simple orthospectrum rigidity: finiteness and genericity. *arXiv e-prints*, page arXiv:2412.15034, December 2024. *Submitted - positively reviewed*

Talks.

- Talk at the *Séminaire Rauzy* seminar Marseille (Nov 20, 2026) - **Invited Speaker**
- Talk at the *geometry seminar of the Max Planck Institute in Leipzig* (Nov 17, 2026) - **Invited Speaker**
- Talk at the *Géométrie* seminar in Nantes (Nov 6, 2026) - **Invited Speaker**
- Talk at the *Théorie spectrale et géométrie* seminar in Grenoble (Oct 22, 2026) - **Invited Speaker**
- Talk at the conference *New Developments of Teichmüller Theory* at MFO in Oberwolfach (Sep 29, 2026) - **Invited Speaker**
- Talk at the *Actions !* seminar at ENS Lyon (Sep 15, 2026) - **Invited Speaker**
- Lightning talk at the conference *YGGT XII*, (Jun 9, 2026)
- Talk at the *Curves, Hyperbolicity, And Teichmüller Spaces (CHATS)* conference in Créteil (Jun 05, 2026) - **Invited Speaker**
- Talk at the *Gaston Darboux* seminar in Montpellier (Apr 24, 2026) - **Invited Speaker**
- Talk at the *Séminaire virtuel francophone Groupes et Géométrie* online seminar (Feb 12, 2026) - **Invited Speaker**
- Talk at the *Geometry and Topology* seminar in Bristol (Nov 25, 2025) - **Invited Speaker**
- Talk at the *Groupes et Actions* seminar in Orsay (Oct 20, 2025) - **Invited Speaker**
- Talk at the conference *Fifth Geometry and Asymptotics of Large Surfaces meeting*, Institut Henry Poincaré (Sep 23, 2025) - **Invited Speaker**
- Talk at the conference *Groups, dynamics, and surface in Paris*, Sorbonne Université (Sep 18, 2025) - **Invited Speaker**
- Talk at the *Géométrie Analytique* seminar, Université de Rennes (Jun 19, 2025) - **Invited Speaker**
- Talk at the *geometry seminar of the Max Planck Institute in Leipzig* (May 27, 2025) - **Invited Speaker**
- Lightning talk at the conference *YGGT XII*, Copenhagen (Apr 8, 2025)
- Talk at the PhD seminar of Université Anger (Mar 4, 2025) - **Invited Speaker**
- Talk at the winter school *7ème école d'hiver de dynamiques d'Aussois*, Aussois, Centre Paul Langevin (Dec 13, 2024) - **Invited Speaker**
- Lightning talk at the Workshop *Random hyperbolic surfaces and random graphs*, Marseille, CIRM (Nov 25, 2024)
- Talk at the conference *Paroles aux jeunes chercheuses et chercheurs du RT Tétraèdre de Platon*, Ecole Normale Supérieure Ulm (Feb 22, 2024) - **Invited Speaker**
- Talk at the conference *Journées des jeunes chercheuses du LAMA 2024*, Université Paris-Est Créteil (May 22, 2024)
- Talk at the geometry colloquium of LAMA, Université Paris-Est Créteil (May 3, 2024) - **Invited Speaker**
- Lightning talk at the conference *YGGT XII*, Bristol (Apr 9, 2024)
- Talk at the *Pampers* seminar, Université de Rennes (Feb 22, 2024)

Attended conferences.

- *Young Geometric Group Theory XIV* in Seoul (Jun 2026)
- *Curves, Hyperbolicity, And Teichmüller Spaces (CHATS)* in Créteil (Jun 2026)
- *Geometry and Spectra of Compact Riemann Surfaces* in Lausanne (Apr 2026)
- *Illustration as a Mathematical Research Technique* in CIRM Marseille (Jan 2026)
- *Géométrie & Dynamique à Aussois* in Aussois (Dec 2025)
- *Exploring Geometry* in Fribourg (Nov 2025)
- *Scienc·e·s - No science without us!* in Toulouse (Nov 2025)
- *Groups, Dynamics, and Surface in Paris* (Sep 2025)
- *LG&TBQ2: geometry, topology, and dynamics* in Montréal (Jun 2025)
- *Young Geometric Group Theory XIII* in Copenhagen (Apr 2025)
- *Winter School Côte d'Azur* in Nice (Jan 2025)
- *7ème école d'hiver de dynamiques d'Aussois* (Dec 2024)
- *Random hyperbolic surfaced and random graphs* in CIRM Marseille (Nov 2025)
- *Paroles aux Jeunes Chercheuses et Chercheurs du RT Tétraèdre de Platon* in Paris (Nov 2024)
- *Hengstberger Symposium: Geometry and Dynamics of Surfaces beyond finite-type* in Heidelberg (Jul 2024)
- *Young Geometric Group Theory XII* in Bristol (apr 2024)
- *Surfaces, Manifolds and Related Topics* in Luxembourg (Mar 2024)
- *Probability and Geometry in, on and of non-Euclidian Spaces* in CIRM Marseille (oct 2023)

Teaching.

- | | |
|-----------|---|
| 2025-2026 | Calculus 1 Lecture and Tutorials for first year undergraduate student (first semester) at Université Paris-Est Créteil. |
| 2024-2025 | Linear Algebra Tutorials for first year undergraduate student (second semester) at Université Paris-Est Créteil. |
| 2023-2024 | Linear Algebra Tutorials for first year undergraduate student (second semester) at Université Paris-Est Créteil. |

Organization and responsibilities.

- | | |
|-------------|--|
| August 2027 | Co-organization of the conference <i>LG&TBQ3: geometry, topology and dynamics</i> in Bielefeld. |
| March 2027 | Co-organization of the conference <i>Queerly Supporting Mathematics</i> at CIRM Marseille. |
| 2025-2026 | Member of the <i>Conseil du labo</i> of the LAMA. |
| 2024-2026 | Evacuation guide (with extinguisher training since March 2026). |
| Juin 2024 | Co-organization of the days of young researcher of LAMA at the IHP in Paris. |
| 2023-2026 | Co-organization of the PhD student's seminar of LAMA (Université Gustave Eiffel and Université Paris-Est Créteil). |

Outreach.

- Illustration of mathematics by sewing and stitching surfaces as well as with crochet.
- Linocut of artistic interpretation of hyperbolic surfaces.

Languages.Speaking languages

French (Native)

English (B2)

Programming languages

Python

LaTeX

Html

Hobby and other skills.

Boardgame

Roller skating

Drawing

Sewing



Figure 1. Linocut of a tight flute surface coiled on itself