

Alice Bouillet

Post-doctoral researcher at ENS Lyon

<http://perso.eleves.ens-rennes.fr/about725/>

✉ alice.bouillet@ens-lyon.fr

Education

- 2020 – 2023 **PhD in Fundamental Mathematics**, *University Rennes 1*, Rennes.
Advisor : Matthieu Romagny - Modules of the subgroups of a finite group scheme in characteristic $p > 0$
- 2019 – 2020 **Second year of Master of Mathematics**, *University Rennes 1*, Rennes.
Fundamental research - Algebra and geometry
- 2018 – 2019 **Professional Teaching qualification in Mathematics (in French : Agrégation)**, *ENS Rennes and University Rennes 1*, Rennes.
- 2017 – 2018 **First year of Master of Mathematics**, *University Rennes 1*, Rennes.
- 2016 – 2017 **Third year of Bachelor of Mathematics**, *University Rennes 1*, Rennes.
- 2015 – 2016 **Erasmus year**, *University College Cork*, Ireland.
- 2014 – 2015 **Second year of Bachelor of Mathematics**, *University Rennes 1*, Rennes.
- 2013 – 2014 **First year of Bachelor of Mathematics**, *University Rennes 1*, Rennes.

Distinctions

- 2016 – 2017 **Lebesgue's grant**, *University Rennes 1*.

Publication

- 2023 **Moduli of p -Lie algebras**, Published in *Manuscripta mathematica*. Arxiv version here..

Other research activities

- From May 2022 **Reviewer, for zbMATH.**

Talks

- May 2023 **Angers**, *Topology and algebraic geometry seminar*.
- Jan. 2023 **Charmey**, *12th Swiss-French Workshop in Algebraic Geometry*.
- Nov. 2022 **ICJ Lyon**, *Algebra seminar*.
- June 2022 **IMB Bordeaux**, *Seminar of Number theory*.
- May 2022 **Dijon**, *Spring School "Invariants in Algebraic Geometry"*.
- May 2022 **Angers**, *PhD student's seminar*.
- April 2022 **Paris 13**, *PhD student's seminar*.
- March 2022 **IRMAR Rennes**, *Seminar of arithmetical geometry*.
- March 2021 **IRMAR Rennes**, *PhD student's seminar*.

Responsibilities

- March 2023 **University of Rennes 1**, *Co-organizer of the day "Equality and sciences : the role of women" : more information here*.
- 2021 – 2023 **University of Rennes 1**, *PhD students representative in the Laboratory Council (IRMAR)*.
- 2021 – 2022 **University of Rennes 1**, *Co-organizer of the conference "Rencontres doctorales Lebesgue"*.
- 2021 – 2022 **University of Rennes 1**, *Co-organizer of the doctoral student seminar in algebra and geometry*.
- 2020 – 2023 **Member of the parity commission of IRMAR.**

Teaching

- 2022 – 2023 **Private lessons for a student in third year of bachelor of mathematics**, *University of Rennes 1*, Group theory, bilinear and linear algebra.
- 2020 – 2023 **Examiner for oral exam for master degree (Agrégation)**, *University Rennes 1*, Rennes.
- 2020 – 2023 **Examiner for oral exam for master degree (CAPES)**, *University Rennes 1*, Rennes.
- 2020 – 2023 **Several tutorials**, *University Rennes 1*, Rennes, 64 hours per year.
Bachelor of Mathematics and Physics : function linear algebra, series expansion, integration theory, differential equations.
- 2019 – 2020 **Examiner oral exam for Bachelor (in French : dans une classe CPGE de MP*)**, *Lycée Chateaubriand*, Rennes, all basic analysis and algebra of first year of university.
- 2019 – 2020 **Tutorials in algebra**, *INSA*, Rennes.
Engineer school. Linear algebra and differential equations.
- Jan-Mar 2015 **Didactic internship in middle school**, *Collège La Providence*, Montauban-de-Bretagne.
- Since 2008 **Private lessons of Mathematics**.
All levels from elementary school to high school.

Internship

- April-July 2020 **Research internship for Master thesis**, *University Rennes 1*.
Advisor : Matthieu ROMAGNY
Characterisation of algebraic groups from their Frobenius kernels
- January 2020 **Research internship**, *University Rennes 1*.
Advisor : David BOURQUI
Nagata's counter example of Hilbert's 14th problem
- April-May 2018 **Research internship**, *University Rennes 1*.
Advisor : Benoît CLAUDON
Arithmetic of elliptic curves, Mordell Weil's theorem
- June-July 2017 **Research internship**, *University Rennes 1*.
Advisor : David BOURQUI
Introduction to algebraic geometry : algebraic varieties

Experiences in relation to Mathematics

- October 2022 **Science day**, *Popularization of mathematics*.
- Nov. 2021 **Meeting of Young female Mathematicians and Computer Scientists**, *Speaker, and presentation of a workshop on stereotypes*, ENS Rennes.
- April 2021 **French competition of young mathematicians**, *Examiner*.
- Year 2021 **Women in Maths day**, *Godmother of a schoolgirl for the whole academic year*, the goal is to help her in her orientation choices ; support her to do scientific studies if she wants to ; show her all the jobs she can do related to maths/sciences.
- 2020/2021/2022 **Women in Maths day**, *Speaker*.
- January 2021 **Teaching in primary school**, *Helping pupils for a mathematical contest*.
- 2017 – 2019 **Proofreading of a maths book, level : master**, "*Pour L'oral à l'agrégation de Mathématiques - Une sélection de développements*", Lucas ISENMANN, Timothée PECATTE, Ellipses, ISBN : 978-2340035270.

Other experiences

- 2012 – 2019 **Seasonal works**, *Food factory, shop and restaurant*.

Other skill

- IT Programmes SageMath, L^AT_EX, Macaulay2
- Languages French, English
- Formations First aid training

Hobbies

Music Accordion

Sport Badminton, climbing, bouldering, biking, paraglider

Other Boardgames