

CAMILLE HERNANDEZ

Curriculum Vitae

PhD student at Université Marie et Louis Pasteur
camille.hernandez@umlp.fr | 03 81 66 64 65
16 Route de Gray, 25000 Besançon

EDUCATION

- 2026-present **PhD in applied mathematics:** *Université Marie et Louis Pasteur, Besançon*. Title: Extrapolation methods in electronic structure calculations. Supervisor: Geneviève Dusson
- 14-27 June 2026 **ISTPC summer school:** *Aussois*. International summer school in electronic structure calculation.
- 2025-2026 **Master's degree in research in mathematics:** *Université Marie et Louis Pasteur, Besançon*, specialized in Numerical Analysis, Partial Differential Equations and functional analysis.
- 2023-2025 **Master's degree in mathematics:** *Université Marie et Louis Pasteur, Besançon*, preparation of the « Agrégation », option: probability and statistics, obtained with Highest Distinction. Rank: 105/287
- 2022-2023 **Bachelor's degree in mathematics:** *Université Marie et Louis Pasteur, Besançon*, obtained with Highest Distinction.
- 2020-2022 **Preparatory classes:** *Lycée Jacques Amyot, Melun*, specialised in mathematics and physics.

RESEARCH RELATED ACTIVITIES

- 2025-present **Master 2 Project :** *Laboratoire de mathématiques de Besançon, Université Marie et Louis Pasteur, Besançon*. Topic: controlled extrapolations for eigenvalue problems from electronic structures. Supervisor: Geneviève Dusson.
- May-July 2024 **Internship in mathematics :** *Laboratoire de mathématiques de Besançon, Université Marie et Louis Pasteur, Besançon*. Topic: Efficient generation and explicit dimensionality of Lie group-equivariant and permutation-invariant bases. Supervisor : Geneviève Dusson.
- 2023 **Master 1 Project :** *Laboratoire de mathématiques de Besançon, Université Marie et Louis Pasteur, Besançon*. Topic : The Vapnik-Chervonenkis dimension. Supervisor : Antonin Procházka.
- 2022 **Bachelor Project :** *Université Marie et Louis Pasteur, Besançon*. Topic: Proof of the Tchebychev theorem for prime numbers using entropy. Supervisor: Jürgen Angst.

CONFERENCE TALKS

- 26-29 May 2026 **Analysis and Simulation of Quantum and Molecular systems:** *Aachen*. Title: Efficient construction and explicit dimensionality of Lie group-equivariant and permutation-invariant spaces.

TEACHING AND DIFFUSION

2025-present	Oral interrogations in preparatory classes: <i>Lycée Victor Hugo, Besançon</i> . 48h in PC* and 30h in PCSI.
1-5 June 2026	Maths C pour L: <i>Université Marie et Louis Pasteur, Besançon</i> . Supervision of a group of 3 students on research related topics and discussions about the place of women in mathematics.

TEACHING AND DIFFUSION

Languages	French: Native speaker English: Advanced (C1) German: Notions (A2)
Programming languages	Python Julia
Office softwares	Word Open Office LATEX
Certification	Pix certificate