

Eloi MARTINET

Current situation

2024 - **Post-doc in Variational methods in Machine Learning**, *JMU*, Würzburg, Germany.

Publications and preprints

- 2024 **Numerical optimization of Neumann eigenvalues on the sphere**, *Journal of Computational Physics*.
- 2023 **Maximization of Neumann Eigenvalues**, with *Dorin Bucur and Edouard Oudet*, *Archive for Rational Mechanics and Analysis* 247(2).
- 2022 **Sharp inequalities for Neumann eigenvalues on the sphere**, with *Dorin Bucur and Mickael Nahon*, Preprint.

Conferences and seminars

- 2024 **Partial Differential Equations seminar**, *IECL*, Nancy.
- 2023 **POEMS seminar**, *ENSTA*, Paris.
- 2023 **Calculus of Variations and Applications**, *Univesité Paris Cité*, Paris.
- 2023 **Partial Differential Equations seminar**, *IRMA*, Strasbourg.
- 2023 **Shape Optimization, Geometric Inequalities and Related Topics**, *Dip. Mat. Appl.*, Naples.
- 2021 **Meeting of the ANR SHAPO**, *Autrans*.
- 2019 **EDPs2 discussion group**, *USMB*, Chambéry.

Internships

- March-July 2019 **Internship in shape optimization**, *LAMA/LJK*, Chambéry/Grenoble.
- May-July 2018 **Internship in machine learning and image processing**, *GIPSA-Lab*, Grenoble.

Teaching experience

- 2024 **Working group in Finite Elements Method and Physics Informed Neural Networks**, *JMU*, Würzburg.
- 2022-2023 **Tutoring of practical sessions**, *ENSIMAG*, Grenoble.
- 2021-2022 **Tutoring of practical sessions and courses**, *UGA*, Grenoble.
- 2019-2020 **Tutoring of practical sessions**, *USMB*, Chambéry.

Supervision

- 2024 **Co-supervision of the MSc Internship of Nicolas Roblet**, *ENSIMAG student*, with Romain Joly.

Education

- 2019-2023 **PhD in spectral shape optimization**, *LAMA*, Chambéry, Under the supervision of D. BUCUR and E. OUDET.
- 2020-2021 **Master's degree "Préparation à l'agrégation"**, *UGA*, Grenoble, Ranked 88.
- 2016-2019 **Master's degree in computer science and applied mathematics**, *ENSIMAG*, Grenoble.
Double Engineer/Master degree programme.
- 2013-2016 **Classes préparatoires MP***, *Lycée Carnot*, Dijon.
Post secondary academic course specialised in mathematics and physics.