



Elodie Maignant

Education and training

- 2019–2020 **Master's degree in Modelisation, Vision, Learning (MVA)**, *ENS Paris Saclay*
- 2018–2019 **Master's degree in Higher Education in Mathematics**, *ENS Paris-Saclay*
Successful candidate to the Agrégation de Mathématiques
- 2016–2017 **Bachelor degree in Mathematics**, *ENS Paris-Saclay*

Work experience - Internships

- 2020– **PhD Student**, *Xavier Pennec and Alain Trouvé*, Inria Sophia-Antipolis, ENS Paris-Saclay
"Geometric manifold learning" [1][3]
- 2020 **Research internship**, *Alain Trouvé*, ENS Paris-Saclay, 5 month
"Data embedding and symmetric spaces with applications to molecular dynamics" [4]
- 2018 **Research internship**, *Philipp Harms*, Freiburg, 4 month
"Statistical analysis of geometric shapes with applications to anthropology" [2]
- 2017 **Research internship**, *Alain Trouvé*, ENS Paris-Saclay, 3 month
"Learning stochastic systems in high dimension"

Associative experience

- 2017–2018 **In charge of the students' quarters for the students' office**
- 2017–2018 **Representative of the department of Mathematics on the students' council**

Languages

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| French | Native | |
| English | Complete working knowledge | <i>Cambridge English Advanced C1</i> |
| German | General working knowledge | |

Miscellaneous

- Music Viola and saxophone playing
- Martial arts Judo and karate practice

Publications

- [1] Nicolas Guigui, Elodie Maignant, Alain Trouvé, and Xavier Pennec. Parallel Transport on Kendall Shape Spaces. In *GSI 2021 - 5th conference on Geometric Science of Information*, volume 12829 of *Lecture Notes in Computer Science*, pages 103–110, Paris, France, July 2021. Springer.
- [2] Philipp Harms, Elodie Maignant, and Stefan Schlager. Approximation of riemannian distances and applications to distance-based learning on manifolds, 2019.

- [3] Nina Miolane and al. ICLR 2021 Challenge for Computational Geometry Topology: Design and Results. working paper or preprint, December 2021.
- [4] Maxim Stolyarchuk, Julie Ledoux, Elodie Maignant, Alain Trouvé, and Luba Tchertanov. Identification of the Primary Factors Determining the Specificity of the human VKORC1 Recognition by Thioredoxin-fold Proteins. *International Journal of Molecular Sciences*, 22(2):802, January 2021.