Marion CHAUVEAU

Education

- 2021–2022 **École Normale Supérieure Paris-Saclay**, 2^{nd} year of Master's degree in applied mathematics and machine learning "Mathématiques/Vision/Apprentissage (MVA)", Gif-sur-Yvette.
- 2020–2021 École Normale Supérieure-ICFP, 2^{nd} year of Master's degree in physics "Soft matter and biological physics ENS-ICFP", ENS, Paris-Saclay University.
- 2018–2019 **École Normale Supérieure Paris-Saclay**, *Licence S.T.S. Fundamental physics*, *ENS Paris-Saclay*, Cachan, Orsay.
- 2015–2018 Scientific CPGE PCSI / PSI* (preparatory classes), Clemenceau High School, Nantes.

Research

- 2022-2024 PhD thesis (in progress), TIMC-Grenoble & Gulliver laboratory (ESPCI).
 - "Generative models for Genome Organisation" under the suppervision of Ivan Junier & Olivier Rivoire.
 - 2022 Research internship, Centre Borelli (ENS Paris-Saclay).
 - Human motion analysis via graph signal dictionary learning (5 month internship with the lecturer Laurent Oudre).
 - 2021 **Research Internship**, *Collège de France (CIRB)*, Paris V.
 - Inference of generative models for bacterial genome from natural sequences (4 month internship with the CNRS researcher Olivier Rivoire).
 - 2019 Research Internship, Plasma Physics Laboratory at Polytechnique, Gif-Sur-Yvette.
 - Study of density and potential fluctuations in a magnetised toric plasma (with the lecturer Pierre Morel).
 - 2019 **Research Internship**, Research Laboratory in Hydrodynamics, Energy and Atmospheric Environment (LHEEA), Centrale Nantes.
 - Study of the performances of the small swell water tank beach.

Conference attendance

- 2024 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, *Orlando, Florida, USA.*
 - Short Talk "Graph dictionary learning for the study of human motion"
- 2024 Journées de la Physique Statistique, Paris.
 - Short Talk "Generative models of Protein sequences"
- 2023 5th course on Multi-scale Integration in Biological Systems , Institut Curie, Paris.
 - Short Talk "Generative models of Protein sequences"
- 2023 Biological sequence variation from statistical modeling to structure, function, and evolutionary dynamics, *Institut d'Études Scientifiques*, Cargese.
 - Poster "Overcoming Undersampling in Generative Models for Biological Sequences"
- 2023 Rencontres Alphy & AIEM, Génomique évolutive Bioinformatique, Alignements, Phylogénies, Approches interdisciplinaires en Evolution Moléculaire, *Université de Grenoble Alpes*.

Teaching

- 2023-2024 Oral examination in Physics and Chemistry (CPGE "Khôlle"), Lycée Descartes, Tours.
 - 2023 Practical works in physics, Sorbonne Université, campus Jussieu, Paris V.
 - Supervision of L1 students for practical work in physical mechanics during 1 semester.
 - 2023 Numerical physics projects, Sorbonne Université, campus Jussieu, Paris V.
 - Supervision of L1 students for numerical physics projects (in python) during 1 semester.
 - 2019 **Teaching Internship**, *Lycée de Cachan*, Cachan.
 - 2 hours per week in a class to help a teacher during pratical work in physics.

Other