



WORK EXPERIENCE



CENTRE DE MATHÉMATIQUES APPLIQUÉES DE L'ÉCOLE POLYTECHNIQUE (CMAP), PhD

April 2021 -

PhD and research internship supervised by François Alouges and Aline Lefevbre-Lepot on magneto-elastic micro-swimmers.



POLITECNICO DI TORINO, Pre-doctoral year of research abroad

October 2019 - July 2020

Internship in the Energy department of Politecnico di Torino, supervised by Fabio Freschi, on "H-matrices and ACA method" as a part of the MICEV project.



UCD SCHOOL OF MATHEMATICS AND STATISTICS, Internship

April - August 2019

Internship supervised by Frédéric Dias and Daniel Giles, in the School of Mathematics and Statistics on "Extended Green's Law : Calculating Beta using machine learning".



DTU ENERGI, Internship

July 2018

Internship supervised by Kaspar Kirstein Nielsen, Christian Bahl and Rasmus Bjørk, entitled "Optimizing magnet structures with neural networks".



ENS PARIS-SACLAY, Internship at CMLA

January 2017 - June 2017

"Deep burst denoising": Image denoising thanks to neural networks (machine learning). Supervised by Jean-Michel Morel, Pablo Arias and Thibaud Ehret.

STUDIES



ENS PARIS-SACLAY

2017-2021

Civil servant and student - departement of Mathematics

M2 Analyse Modélisation Simulation at Université Paris-Saclay, M1 Hadamard at Ecole Normale Supérieure Paris-Saclay, Université Paris-Saclay and Ecole Polytechnique. Bachelor's Degree in Mathematics at ENS Paris-Saclay in partnership with Université Paris Diderot.



LYCÉE MARCELIN BERTHELOT

2015-2017

*CPGE MPSI-MP**

Two intensive years of training in Mathematics, Physics, and computer Science, in order to take competitive examinations and enter the most prestigious engineering or research schools.



LYCÉE NOTRE DAME DE LA PROVIDENCE

2008-2015

High School

A-Level in Sciences with highest honors. Took part in the Concours Général in Physics and English.

TEACHING



ÉCOLE POLYTECHNIQUE, Teaching fellow

2021-2023

Course list:

- MAP350: Preparatory mathematics course, 1st year of Ingénieur Polytechnicien Program
- Computational mathematics (MAA106, Bachelor of Science, 1st year)
- Numerical linear algebra (MAA208, Bachelor of Science, 2nd year)
- Supervision of Bachelor Thesis (internships, Bachelor of Science, 3rd year).



INSTITUT VILLEBON GEORGES CHARPAK, Tutoring

January 2021 - June 2021

Helping bachelor students in mathematics.



INSEP, Mathematics guest teacher

2017-2018

Classes for high-schoolers.



UNITED NETWORK EU, Committee director

2014-2018

IMUNA/United Network EU: Planning and chairing debates in English in Rome (IMUN) and Paris (FMUN) for high school students in English in direct partnership with the UN. Speeches and training classes for students on the subjects they will be debating on, and on rules of procedure during debates.



LYCÉE NOTRE DAME DE LA PROVIDENCE, Tutoring

2012-2015

Tutoring in Mathematics, English and all subjects for middle- and high-schoolers.

PUBLICATIONS



UCA FALL PROGRAM ON COMPLEX SYSTEMS, Summer school
Two-week summer school, upcoming paper.

October 2021

COMMUNICATIONS



KYOTO UNIVERSITY, JAPAN, RIMS Fluid Dynamics Group seminar

October 26th 2022



MICROSCALE OCEAN BIOPHYSICS ONLINE SEMINAR,
"Flagellar locomotion from a mathematical point of view"

October 18th 2022



CJC-MA, Calais, France

Talk during a mini-symposium on mathematical modelling applied to biological systems.

September 21st-23rd 2022



CANUM 2020+2, Talk "Flagellar locomotion of micro-organisms"

Talk during a mini-symposium on control and optimal control, invited by L. Giraldi and P. Lissy.

June 13th-17th 2022

SHORT-TERM RESEARCH VISITS



RIMS, KYOTO UNIVERSITY, JAPAN, 3 weeks
With C. Moreau and K. Ishimoto.

October 2022

SKILLS & INTERESTS



Native language

B2 Goethe Institute

C2 Cambridge, lived in America for 3 years

Italian: Professional working proficiency



Advanced level in Python and Matlab, intermediate level in C/C++ and CamL

Advanced level in Latex, Beamer and office tools