

SUMMARY

Student attending the graduate programme in engineering at Ecole Polytechnique (currently in 5th year of higher education).

EDUCATION

Diplôme d'ingénieur (Master level):

September 2023 - August 2024

Ecole Polytechnique, Palaiseau, France

Major: Quantum sciences and technologies

Condensed Matter Physics, Quantum Optics, Atomic Physics

Gradué en Ingénierie (Bachelor level):

September 2021 - August 2023

Ecole Polytechnique, Palaiseau, France

Major: Engineering and Science

- Group research project: Quantum Monte Carlo methods for the quantum many-body problem
- Volunteering: yearly sailing cruise organisation

Classe Préparatoire aux Grandes Ecoles (PCSI-PC*):

September 2019 - August 2021

Collège Stanislas, Paris, France

Major: Physics, Mathematics, Chemistry

A two-year intensive preparatory course with the goal of training students for the highly selective exams of France's grandes écoles.

International Option of the French Baccalaureate (QIB, American section):

September 2008 - August 2019

Ecole Jeannine Manuel, Paris, France

Through this bilingual curriculum, I attended classes in both French and English (mother tongue level).

LANGUAGE CERTIFICATIONS

- **English:** IGCSE, Literature & First Language English (Level C1 - C2 CEFR) - Cambridge Assessment International Education
- **English:** IELTS Academic - Overall Band 8.0
- **Spanish:** DELE B2 (Diploma de Español como Lengua Extranjera) - Instituto Cervantes
- **Chinese:** HSK 3 汉语水平考试 (Level B1 CEFR) - Confucius Institute

WORK EXPERIENCE

Research Internship:

September 2023 - March 2024

Université Paris-Saclay, Institut d'Optique

Graduate School, Palaiseau, France

Helped set up a cold atom trapping experiment, in the "Quantum Optics-Atoms" group led by Antoine Browaeys. The group focusses on experimental studies of the effects of dipole-dipole interactions in strongly correlated systems of a few atoms. Worked in the "Dysprosium" team:

- Implemented a method for line by line rearrangement of cold atoms in a 2D optical lattice
- Numerical simulations of sideband cooling for Dy (cooling necessary to study ensembles of two-level atoms interacting via light-mediated interactions)

Research and Development Engineer Internship:

June 2023 - August 2023 (3 months)

Atos, Les Clayes-Sous-Bois, France

Research intern at Eviden Quantum Lab

- Implemented measurement approaches for observable expectation value estimation
- Analyzed and implemented a Quantum Monte Carlo algorithm

Physics Teaching Assistant:

May 2022 - June 2023 (1 year)

Collège Stanislas, Paris, France

Tutoring and mock orals for 1st year physics majors, to prepare the competitive exams of France's Grandes Ecoles

Mandatory military training:

September 2021 - March 2022 (7 months)

Armée de Terre

Mandatory human and military training, part of the Ingénieur Polytechnicien Program at Ecole Polytechnique. As Second Lieutenant, I managed and trained 30 army recruits.

PROGRAMMING SKILLS

- Python
- LaTeX
- Java
- SQL
- Git/GitHub