

Eloïse Letournel

PhD student in applied mathematics at CERMICS (France)

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Education

- 2021-2024 **PhD in applied mathematics at CERMICS: Finite size effects in electronic structure calculation**, under the direction of Antoine Levitt, team Matherials (Champs sur Marne).
- 2020-2021 Engineering Student and **Master 2 student in applied mathematics**, at **ENSTA** (Palaiseau), Institut Polytechnique de Paris. Master AMS: Analysis, modelling and simulation. **Study of PDE and their implementation**.
- 2017-2021 **Engineering Student at École Polytechnique (Palaiseau)**, France's top engineering school.
Applied mathematics, Quantum Physics, Algorithmics, Statistical Physics, Fluid Mechanics, Mathematics, Biology, Special Relativity.
- 2018-2019 **Collective Scientific Project (PSC) X-Rocket**, design and construction of an experimental rocket with Stealth Plasma for Polytechnique. Best PSC Award.
In charge of the mechanics and contacts of the sponsors within the team of 10.
- 2015-2017 **Intensive 2-year university level preparation in Math and Physics**, Lycée Blaise Pascal (Orsay, France).
- 2014-2015 **Scientific Baccalaureate with Highest Honors**, Lycée Camille Claudel (Palaiseau, France). Specializing in Mathematics, with English option.

Professional experience

- 2021 **6-months internship at CERMICS, team Matherials**, computation of quantum resonances in solids and molecules .
- 2020 **18-weeks internship (telework) with the applied mathematics department of the FAU Erlangen**, structural optimization in the context of additive manufacturing.
- 2019 **Research and development 3-month internship at ST Microelectronics. Simulation of phase change non-volatile memories (semiconductors)**, Agrate (Italy).
- 2018 - 2019 **Oral examinations in Mathematics**,
Advanced post Baccalaureate courses in Mathematics (France).
- 2017 - 2018 **In charge of interventions at the Paris fire Brigade (BSPP)**,
Human and military formation internship (6 months). About 420 interventions, 1200 hours of work. I led teams of two firemen.

Languages

- French Native language.
- English Fluent. (TOEFL score: 114)
- Italian Fluent.
- German Basic level of German.

Computer skills

- Languages Python
C, Java, C++
Matlab
HTML, javascript, php
- Modelisation Solidworks, Catia
- Database SQL

Personal interests

- Hobbies Painting, running, debating club, theater playing, guitar playing.
- Volunteering I am engaged in an association which takes disabled children to running events.