

# LOAN RENAUD

First year master's student in the PFA (Fundamental and Applied Physics) program of Sorbonne Université

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📍 Paris  
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📍 10 rue Saint-Placide, 75006 PARIS  
📅 Born on 14/12/2001



## EXPERIENCE

### Plas@Par summer school (plasma physics)

📅 August 20th to 27th 2022 in Roscoff  
University of Pisa, Sorbonne University, IPI & EUR PLASMA Science

### Summer school "Graduate School in Particle & Astroparticle"

📅 July 19th to 27th 2022 in Annecy  
Laboratoire d'Annecy de Physique des Particules (LAPP - CNRS/IN2P3)

### Institut d'Astrophysique de Paris (IAP)

📅 Jan 2022 - June 2022 (10 full days + ½ a day per week)  
Supervisor : Damien LE BORGNE.  
• Determination of a set of galaxy evolution scenarios. Adjustment of the colors of galaxies in deep surveys by spectro-photometric models.

### Laboratoire de Physique Théorie et Hautes Énergies (LPTHE)

📅 Sept 2021 - Jan 2022 (½ a day per week)  
Supervisors : Benjamin FUKS, Michela PETRINI, Dan ISRAEL.  
• Bibliography on string theory and particle physics.

### Laboratoire Kastler Brossel (LKB) ENS | Collège de France | CNRS

📅 Feb 2021 - June 2021 (½ a day per week)  
Supervisors : Nicolas TREPS, Jérôme BEUGNON, Tristan BRIANT.  
• Introduction to the experiments.

### Institut de Minéralogie, de Physique des Matériaux et de Cosmochimie (IMPMC)

📅 Sept 2020 - Jan 2021 (½ a day per week)  
Supervisors : Marco SAITTA, Fabio PIETRUCCHI.  
• Study of the behavior of a fullerene dimer through molecular dynamics simulation and data analysis.

## EDUCATION

### Master's degree in fundamental physics PFA : *Fundamental and Applied Physics*

Sorbonne Université  
📅 Sept 2022 - Today 📍 Campus Pierre Marie Curie, Paris 5ème

### Bachelor's degree in physics SPRINT : "*Sorbonne Physique Recherche Intensive et Nouvelles Technologies*" - Valedictorian

Sorbonne Université  
📅 Sept 2020 - June 2022 📍 Campus Pierre Marie Curie, Paris 5ème

- **with highest honors - final grade : 18.6/20**
- intensive and selective curriculum in physics and mathematics (additional courses, internships in laboratories...)

Scientific Baccalaureate (High School diploma) in engineering sciences and cinema

With highest honors - final grade : 19.86/20

Passionate about science and physics, I want to become a researcher in physics. I am looking for a 2 months internship in a laboratory for my first year of master.

## OTHER ACTIVITIES

👤 Council member of the physics department of Sorbonne University (2022-2024).

👥 Past-president, honoray member and co-founder of *Association du cursus SPRINT de Sorbonne Université*

☆ Astronomy and astrophotography  
Planetary and deep sky captures.

## SKILLS

Python Machine Learning  $\LaTeX$   
Linux fundamentals C fundamentals  
Project management Team spirit  
Team management Communication  
Faculty to adapt  
Assuming responsibilities

### Projects

- Cloud chamber (using Peltier effect)
- Low-cost electrochemistry (realization of a potentiostat, experimentation on the prototype and realization of a rotating electrode)
- Wave simulation (1D 2D)
- Low-cost stellar spectroscopy
- "Behind the blob, research", CNRS
- Walking droplets (experimental) and bouncing ball (modelling)

## LANGUAGES

French Native speaker  
English C1  
Spanish B1/B2