

# Emilie PERNET

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## WORK EXPERIENCE

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### Student researcher

06/02/2023 – Present

*Instituto de Astrofísica de Canarias*

*La Laguna 38205, Santa Cruz de Tenerife,  
Spain*

Supervisor: Dr. Ignacio Martin Navarro

- “Galaxies evolution through their stellar population”
- Work presented as a conference talk during “A life devoted to stellar population” (October 2023), published letter (in progress)
- Use of Python, pPXF, astropy, spectral analysis

### “Discovering” placement

October 2017

*Université Grenoble Alpes*

*La Tronche 38700, Isère, France*

Supervisor: Mikael Martin, Lab Manager

- To discover a research lab environment (technicians, engineers, researchers)
- I took part in: bacterial experiments, preparation of bacteria and yeast's medium, PCRs and agarose gels.
- I learnt: how a research team works, how to work within a team, what is to be a researcher

## EDUCATION

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### Univertsity of Surrey

Guildford, UK

*MPhys degree, Nuclear Astrophysics*

*2020-present day*

*(expected graduation 06/2024)*

- Four years course, including 10 months of research Feb-Dec2023
- Year 1: 82.63% ; Year 2: 82.75%; Year 3: 78%
- Modules including: Special relativity, Nuclear Astrophysics, Atoms to Lasers, Modern Computational techniques, Research techniques in Astronomy
- Awards: ‘The Department of Physics Level 5 Prize’ for the best overall performance at Level 5 of the Physics UG Programmes and ‘The Dr. Chris Sullivan Prize’: for the best performing second-year student in Atoms to Lasers

### CNED (online school) & ASPEN (private structure)

Meylan, France

*French Baccalauréat, Scientific*

*2018-2020*

- Final grade (with coefficients): 16.88/20, “with highest honour”
- Detailed grades: Physics-Chemistry: 20/20, Mathematics: 19/20, Biology: 17/20, History: 17/20, English: 14/20, Philosophy: 14/20, German: 14/20, French: 12.5/20
- I completed the three years of high school in two years

## SKILLS

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### Computing

- Fluent in Python, main libraries (e.g. NumPy, Matplotlib) and specific libraries (e.g. pPXF, astropy)
- Competent with Microsoft 365, especially Excel, used for data analysis
- Competent with Latex, used to write reports, paper, and other documents
- Basic knowledge of C, online courses

### Communication and team work

- Class representative for 3 years, communication between students and teachers
- Member of the Administration Board in secondary school
- Took an active part in University's group projects (e.g. Asteroid trajectory and interception; Fabry-Perot Interferometer experiment, etc)
- Communication within a research team: group meetings, journal club, etc

## LANGUAGES AND HOBBIES

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### Languages

- French, mother tongue
- English, fluent (test from 2020 before studying in the UK: B2 level)
- German, learned in school, beginners level
- Spanish, self taught, beginners level

### Hobbies

- Diving (since 2017): member of the University Scuba Diving Society's Committee.
- Badminton (since 2015): competitions at school then university level.
- Board games: strategic and cooperative games. Involved in the University Board Games Society.
- Photography
- Reading

## REFERENCES

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Name	Employer	Title	Email
Ignacio Martin Navarro	Instituto de Astrofísica de Canarias	Dr.	imartin@iac.es
Lisa Morrison	Physics Department, University of Surrey	Dr.	l.n.morrison@surrey.ac.uk