

# Laura Elina Uronen

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<b>EDUCATION</b>	<b>Integrated MPhys Astrophysics (Hons), 1st Class</b>	<b>2018 - 2023</b>
	<i>University of St Andrews, Scotland, UK</i>	

*Dissertation title:* "Partial eclipse of the heart for HD 181793"

Supervisors: Andrew C. Cameron, Tom Wilson.

The project focused on determining the stellar characteristics of HD 181793, which I presented as a newly-identified eccentric heartbeat system. I used MCMC model fitting on transit and radial velocity data and spectral separation of the stellar components to determine the system parameters.

<b>The British College of Benalmádena, Spain</b>	<b>2014 - 2018</b>
A-level Mathematics (A*), French (A*), Physics (A), Chemistry (A).	

<b>EXPERIENCE</b>	<b>Research internship</b>	<b>Summer 2022</b>
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*University of St Andrews School of Physics*

Supervisor: Juan Hernández Santisteban.

Six week summer research position. Studied the cataclysmic variable PHL 1445 to establish the nature of the secondary object in the system as an evolved brown dwarf. Used Python to work with VLT spectra and conduct Doppler tomography to obtain a model-independent radial velocity for the secondary object and thus determine its mass. Analysis of the spectral lines also confirmed the star as an evolved brown dwarf in agreement with stellar binary evolution theory.

<b>President</b>	<b>2022 - 2023</b>
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*University of St Andrews Physics Society*

I organise and chair biweekly meetings for the committee, arrange our events calendar and delegate the organisational aspects to the appropriate committee members, coordinate with other Societies and the School, and attend and oversee our events. Jointly with the Treasurer I am in charge of managing and overseeing the Society's funding and successfully organised a sponsorship for the Society this year.

<b>Student Ambassador</b>	<b>2019 - 2023</b>
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*University of St Andrews School of Physics*

Assist with prospective applicants' and students' visiting days, both in-person and online.

<b>Class Representative</b>	<b>2021 - 2022</b>
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*University of St Andrews School of Physics*

Elected student representative position, attended regular meetings with other representatives and staff to raise student concerns and work on solving larger issues.

<b>Various committee positions</b>	<b>2019 - 2022</b>
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*University of St Andrews Physics Society*

2021-2022 Vice President

2019-2021 Events convener & Publicity Officer

## SKILLS

- Fluent English, Finnish, French; conversational Spanish; basic German and Mandarin Chinese.
- Extensive experience with Python particularly in astronomical statistical data analysis and spectral modelling. Have also completed a module on machine learning methods.
- Experience in Fortran 90 in creating gravitational N-body simulations and running Monte Carlo radiation transport simulations, worked with grid code.
- Good team communication and problem-solving skills from university group projects and extracurricular activities.
- Experienced in public speaking and presentation through course assignments and society activities.