

# Payton E. Rodman

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## Education

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### University of Cambridge, Institute of Astronomy

**PhD** Astronomy

Supervisor: Professor Christopher Reynolds

Cambridge, UK

Expected 2023

### University of Tasmania

**BSc (Hons)** Physics

Awarded first class Honours with University Medal

Thesis: Probing Intracluster Gas with Faraday Rotation from Black Hole Jets

Supervisors: Dr Stanislav Shabala, Dr Ross Turner

Hobart, AUS

2018

### University of Tasmania

**BSc** Physics and Applied Mathematics

GPA: 7.0/7.0

Hobart, AUS

2017

## Research Experience

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### CSIRO Astronomy and Space Science

**Undergraduate Vacation Scholar**

Supervisor: Dr Cormac Reynolds

Perth, AUS

Nov 2016 – Feb 2017

Used large-scale, multi-epoch surveys to study variability in radio sources caused by inhomogeneities in the interstellar and intergalactic medium.

### University of Tasmania

**Summer Research Student**

Supervisors: Dr Stanislav Shabala, Dr Ross Turner

Hobart, AUS

Nov 2015 – Feb 2016

Used data from the citizen science project *Radio Galaxy Zoo* to study whether nearby galaxy clustering effects the physical properties of AGN jets, with focus on classical double radio galaxies. A paper detailing the findings has been published in MNRAS.

## Publications

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1. *Radio Galaxy Zoo: observational evidence for environment as the cause of radio source asymmetry*  
**Rodman, P. E.**, Turner, R. J., Shabala, S. S., Banfield, J. K., Wong, O.-I., Andernach, H., Garon, A. F., Kapińska, A. D., Norris, R. P., Rudnick, L. (2019), *MNRAS*, 482(4):5625-5641

## Teaching Assistantship

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**Lent 2020:** Supervisions (recitation sections of 3 students) for Astrophysical Fluid Dynamics in

Part II, *University of Cambridge*

**Sem 2 2019** Marker for Statistical Physics and Solid State Physics, *University of Tasmania*

**Sem 1 2018, 2019** Marker for Physics 1A, *University of Tasmania*

**Sem 2 2018** Marker for Physics 1B, *University of Tasmania*

**Sem 1 2017** Peer tutor for Physics 1A, *University of Tasmania*

## Awards and Scholarships

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**2019: Cambridge Australia Scholarship** (Honorary)

**2019: Gates-Cambridge Scholarship**

**2018: Dean's Honour Roll** for Bachelor of Science with Honours

**2018: Ken McCracken Prize** for the best Honours thesis in the discipline of Physics

**2018: Vice-Chancellor's Leadership Award**

**2018: Don Gaffney Scholarship**

**2017: AIP Summer Meeting Travel Scholarship**

**2017: Dean's Honour Roll** for Bachelor of Science

**2017: Australian Institute of Physics Prize** for the greatest proficiency in third year Physics

**2017: TEMCO Community Foundation Scholarship in Science**

**2016: Sir Phillip Fysh Prize** for the best student in second year Physics

**2016: CSIRO Undergraduate Vacation Scholarship**

**2015: Dean's Summer Research Scholarship**

**2015: John Fox Memorial Prize** for the first year female student with the highest marks in Physics and Mathematics

**2015: F.M. Young Memorial Prize** for the greatest proficiency in the first year of the degree of Bachelor of Science

**2015: Dean's Summer Research Scholarship**

**2015: Dr. Peter Smith Scholarship in the Physical Sciences**

## Public Outreach

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**2017–2019:** Tastrofest (1hr), invited public lectures on black holes

**2016–2019:** University of Tasmania Open Days and Cub Scout Visits, regular volunteer

**2019:** Tasmanian Youth Science Forum Panellist

**2018:** UTAS Science & Engineering Investigation Awards Head Judge

**2018:** BeakerStreet@TMAG Roving Scientist

**2018:** Festival of Bright Ideas Presenter

**2018:** Young Tassie Scientist