

Payton E. Rodman

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Education

University of Cambridge, Institute of Astronomy Cambridge, UK
PhD Astronomy Expected 2023
Supervisor: Professor Christopher Reynolds

University of Tasmania Hobart, AUS
BSc (Hons) Physics 2018
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

University of Tasmania Hobart, AUS
BSc Physics and Applied Mathematics 2017
GPA: 7.0/7.0

Research Experience

CSIRO Astronomy and Space Science Perth, AUS
Undergraduate Vacation Scholar Nov 2016 – Feb 2017
Supervisor: Dr Cormac Reynolds
Used large-scale, multi-epoch surveys to study variability in radio sources caused by inhomogeneities in the interstellar and intergalactic medium.

University of Tasmania Hobart, AUS
Summer Research Student Nov 2015 – Feb 2016
Supervisors: Dr Stanislav Shabala, Dr Ross Turner
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

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

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

- 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

- 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