

Payton E. Rodman

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Education

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

CSIRO Astronomy and Space Science

Undergraduate Vacation Scholar

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.

Perth, AUS

Nov 2016 – Feb 2017

University of Tasmania

Summer Research Student

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.

Hobart, AUS

Nov 2015 – Feb 2016

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