

Jasmine Anderson-Baldwin

PHD CANDIDATE · CENTRE FOR ASTROPHYSICS AND SUPERCOMPUTING

Swinburne University of Technology, Melbourne, VIC, Australia

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Education

Swinburne University of Technology

Melbourne, Australia

PHD, ASTROPHYSICS

2024–present

- Supervisor: Prof. Jarrod Hurley
- Co-supervisors: Dr Jade Powell, Dr Yuzhe Song
- Thesis: *A New Census of the Transient Populations of Star Clusters*

University of Auckland

Auckland, New Zealand

MSc, PHYSICS

2022–2023

- Supervisors: A/Prof. Nicholas Rattenbury, Dr Michele Bannister
- Thesis: *LEO Satellite Constellations in the MOA Database*

University of Auckland

Auckland, New Zealand

BSc(HONS), PHYSICS

2020–2022

- Supervisors: A/Prof. Nicholas Rattenbury, Dr Michele Bannister
- Dissertation: *Investigation of (2069) Hubble in the MOA-II Database*

University of Auckland

Auckland, New Zealand

BSc, PHYSICS & MATHEMATICS

2016–2019

- Science Scholar

University of Auckland

Auckland, New Zealand

BA, LINGUISTICS & LOGIC AND COMPUTATION

2016–2019

Research Experience

University of Auckland – Department of Physics

Auckland, New Zealand

SUPERVISOR: A/PROF. NICHOLAS RATTENBURY

2023–2024

- Research Assistant: Free Space Optical Communications
- Testing of an experimental extremely low-resource optical beacon for potential use on microsatellites.

Teaching Experience

2018–2023 **ASTRO 100, PHYSICS 102, PHYSICS 160**, Graduate Teaching Assistant

University of Auckland

2018–2023 **Tuākana Mentoring Programme**, Graduate Teaching Assistant

University of Auckland

2021 **Third Year Advanced Lab**, Graduate Teaching Assistant

University of Auckland

2018–2019 **MATHS 208, COMPSCI 225**, Teaching Assistant

University of Auckland

Awards, Fellowships, & Grants

2024 **ARC Research Training Program Scholarship**, Swinburne University of Technology

2022 **Sustainability Network Research Award**, University of Auckland

2022 **Rangiriri & Mātene Te Whiwhi Winiata Scholarship**, Māori Education Trust

2019 **First in Course (Linguistics 203: Applied English Grammar)**, University of Auckland

2017 **Summer Research Scholarship**, University of Auckland

2017 **Department of Physics Scholarship**, University of Auckland

Publications

PUBLISHED

Nandakumar, S., Eggl, S., Tregloan-Reed, J. et al. including **Anderson-Baldwin, J.** (2023). *The high optical brightness of the BlueWalker 3 satellite*. Nature 623, 938–941.

IN REVIEW

IN PREP

Anderson-Baldwin, J., Bannister, M. T., Rattenbury, N. J., Cowan, P. *A Précis of the MOA-II Observations*.

Anderson-Baldwin, J., Hurley, J. R., Flynn, C. *The old open cluster M67 in N-body models and Gaia*.

Dage, K. C., Hunt, E. L., **Anderson-Baldwin, J.**, et al. *The Secret Lives of Open Clusters: a Multiwavelength Examination of Three Open Clusters*.

Presentations

INVITED TALKS

CONTRIBUTED PRESENTATIONS

2025 June. *M67 in NBODY6++GPU and Gaia DR3*. Poster presentation: IAU Symposium 398 & MODEST-25: Compact Objects and Binaries in Dense Stellar Systems, Seoul, South Korea.

2023 July. *LEO Satellite Constellations in the MOA Database*. Oral presentation: New Zealand Institute of Physics & Physikos Conference, Auckland, New Zealand.

2022 June. *The impact of satellite constellations on the MOA telescope*. Poster presentation: Royal Astronomical Society of New Zealand Conference, Whangārei, New Zealand.

Outreach & Professional Development

SERVICE AND OUTREACH

2022 **Mount John Observatory Open Day**, Volunteer

2019 **Department of Physics Open Day**, Volunteer

2018 **Physics Association of the University of Auckland**, Committee Member

2018 **Museum of Transport and Technology Super STEM Fair**, Volunteer

2016–2017 **Maths Craft Festival**, Volunteer

DEVELOPMENT

OzGrav ECR Workshop, Brisbane, Australia (December 2024). Particular focuses on science communication and outreach.

Harley Wood School of Astronomy, Sydney, Australia (June 2024). Main topics were big data and collaborations, as well as a focus on how to manage PhD candidature.

PROFESSIONAL MEMBERSHIPS

Astronomical Society of Australia (ASA)

- Australian National Institute for Theoretical Astrophysics (ANITA)
- Early Career Researcher Chapter

LSST Stars, Milky Way & Local Volume Science Collaboration (SMWLV)

- SMWLV Star Clusters Working Group

ARC Centre of Excellence for Gravitational Wave Discovery (OzGrav)