

Madeline Marshall

Email madelinem1 at student.unimelb.edu.au

Education

2017–Present	Doctor of Philosophy	University of Melbourne
	<i>Thesis:</i> “The Host Galaxies of High-Redshift Black Holes”	
	<i>Supervisors:</i> Professor Stuart Wyithe, Dr Simon Mutch	
	<i>Expected Completion:</i> August 2020	
2016	Bachelor of Science with First Class Honours	University of Tasmania
	<i>Thesis:</i> “Triggering Active Galactic Nuclei in Galaxy Clusters”	
	<i>Supervisors:</i> Dr Stanislav Shabala, Dr habil. Martin Krause	
2015–2017	Diploma of Philosophy	University of Tasmania
2013–2015	Bachelor of Science	University of Tasmania
	<i>GPA:</i> 7.0 on a 7 point grading scale	

Additional Research Experience

Nov 2015–Jan 2016	Summer Research Program	Monash University
	<i>Thesis:</i> “Simulating Binary Neutron Star Mergers with SPH”	
	<i>Supervisors:</i> Dr James Wurster, Dr Paul Lasky	
July–Nov 2015	Physical Science Research Project	University of Tasmania
	<i>Thesis:</i> “Methanol absorption in PKS B1830-211 at milliarcsecond scales”	
	<i>Supervisor:</i> Professor Simon Ellingsen	
Nov–Dec 2015	Summer Vacation Research Program	University of New South Wales
	<i>Thesis:</i> “Exoplanet Detection using Radial Velocities”	
	<i>Supervisor:</i> Professor Robert Wittenmyer	

Publications

Marshall, M. A., Mutch, S. J., Qin, Y., Poole, G. B., and Wyithe, J. S. B.: 2019, “*Dark-ages Reionization and Galaxy Formation Simulation – XVII. Sizes, angular momenta and morphologies of high redshift galaxies.*” MNRAS 488, 1941. DOI: 10.1093/mnras/stz1810

Marshall, M. A., Shabala, S. S., Krause, M. G. H., Pimbblet, K. A., Croton, D. J., and Owers, M. S.: 2018, “*Triggering active galactic nuclei in galaxy clusters.*” MNRAS 474, 3615. DOI: 10.1093/mnras/stx2996

Marshall, M. A., Ellingsen, S. P., Lovell, J. E. J., Dickey, J. M., Voronkov, M. A., Breen, S. L.: 2017, “*Methanol absorption in PKS B1830-211 at milliarcsecond scales.*” MNRAS 466, 2450. DOI: 10.1093/mnras/stw3295

Conference Talks

July 2019	Barefoot Reionization: Exploring the First Billion Years of the Universe Fitzroy Island, Queensland, Australia <i>The Host Galaxies of High Redshift Quasars</i>
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February 2019	ANITA Science Workshop Swinburne University of Technology, Melbourne, Australia <i>The Sizes and Morphologies of High Redshift Galaxies from Semi-Analytics</i>
July/August 2018	Are AGN Special? Durham University, Durham, United Kingdom <i>Ram Pressure Triggers AGN in Galaxy Clusters</i>
July 2018	The Early Growth of Supermassive Black Holes Sexten Center for Astrophysics, Sexten, Italy <i>Exploring High-z Black Hole–Bulge Relations With Semi-Analytics</i>
June 2018	Astronomical Society of Australia Annual Scientific Meeting Swinburne University of Technology, Melbourne, Australia <i>Exploring High-z Black Hole–Bulge Relations With Semi-Analytics</i>
February 2018	ANITA Theory Workshop Curtin University, Perth, Australia <i>Exploring High-z Black Hole–Bulge Relations With Semi-Analytics</i>
July 2017	Astronomical Society of Australia Annual Scientific Meeting Australian National University, Canberra, Australia <i>Triggering AGN in Galaxy Clusters</i> Bok Prize Talk

Workshops & Training

- **São Paulo School of Advanced Science on First Light: Stars, Galaxies and Black Holes in the Epoch of Reionization** Instituto de Astronomia, Geofísica e Ciências Atmosféricas da Universidade de São Paulo, Brazil, July–August 2019
- **SciCoder Workshop** University of Melbourne, November 2018
- **Harley Wood School of Astronomy** Ballarat Observatory, June 2018 (LOC member)
- **ITSO/AAO Observational Techniques Workshop** Australian Astronomical Observatory Headquarters, April/May 2018
- **ANITA Gravitational Wave Astronomy Summer School** University of Western Australia, February 2018
- **CAASTRO Coding Workshop** Swinburne University of Technology, December 2017
- **ADACS - Introduction to high performance computing (HPC) for astronomers** Swinburne University of Technology, November 2017
- **CAASTRO Student Writing Workshop** University of Melbourne, August 2017
- **Harley Wood School of Astronomy** Australian National University, July 2017

Scholarships & Prizes

- **Alan Kenneth Head Travel Scholarship** University of Melbourne, 2018
- **Women in Physics Award** University of Melbourne, 2017
- **Australian Government Research Training Program (RTP) Scholarship** University of Melbourne, 2017–2020
- **Bok Prize** for outstanding research in astronomy by an Honours student or eligible Masters student at an Australian university, Astronomical Society of Australia, 2017
- **University Medal** University of Tasmania (UTAS), 2017
- **Tasmania Honours Scholarship** UTAS, 2016
- **Adrian La Palombara Annual Appeal Honours Scholarship in Physics** UTAS, 2016
- **Dean’s Roll of Excellence for the Faculty of Science, Engineering and Technology** UTAS, 2013, 2014, 2015
- **Australian Institute of Physics Prize** for greatest proficiency in final year undergraduate Physics, UTAS, 2015
- **Premier of Tasmania National Undergraduate Scholarship** UTAS, 2013–2016

Teaching Experience

- **Lab Demonstrator, Third Year Physics** University of Melbourne, Semester 1 2018 to present
- **Lab Demonstrator, First Year Physics (Advanced)** University of Melbourne, Semester 2 2017