

# Madeline Marshall

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## Education

<b>2017–Present</b>	<b>Doctor of Philosophy</b>	<b>University of Melbourne</b>
	<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	
<b>2016</b>	<b>Bachelor of Science with First Class Honours</b>	<b>University of Tasmania</b>
	<i>Thesis:</i> “Triggering Active Galactic Nuclei in Galaxy Clusters”	
	<i>Supervisors:</i> Dr Stanislav Shabala, Dr habil. Martin Krause	
<b>2015–2017</b>	<b>Diploma of Philosophy</b>	<b>University of Tasmania</b>
<b>2013–2015</b>	<b>Bachelor of Science</b>	<b>University of Tasmania</b>
	<i>GPA:</i> 7.0 on a 7 point grading scale	

## Additional Research Experience

<b>Nov 2015–Jan 2016</b>	<b>Summer Research Program</b>	<b>Monash University</b>
	<i>Thesis:</i> “Simulating Binary Neutron Star Mergers with SPH”	
	<i>Supervisors:</i> Dr James Wurster, Dr Paul Lasky	
<b>July–Nov 2015</b>	<b>Physical Science Research Project</b>	<b>University of Tasmania</b>
	<i>Thesis:</i> “Methanol absorption in PKS B1830-211 at milliarcsecond scales”	
	<i>Supervisor:</i> Professor Simon Ellingsen	
<b>Nov–Dec 2015</b>	<b>Summer Vacation Research Program</b>	<b>University of New South Wales</b>
	<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.*” Submitted to MNRAS. arXiv: 1904.01619

**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

<b>February 2019</b>	ANITA Science Workshop Swinburne University of Technology, Melbourne <i>The Sizes and Morphologies of High Redshift Galaxies from Semi-Analytics</i>
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- July/August 2018** Are AGN Special?  
Durham University, Durham, UK  
*Ram Pressure Triggers AGN in Galaxy Clusters*
- July 2018** The Early Growth of Supermassive Black Holes  
Sexten Center for Astrophysics, Sexten, Italy  
*Exploring High- $z$  Black Hole–Bulge Relations With Semi-Analytics*
- June 2018** Astronomical Society of Australia Annual Scientific Meeting  
Swinburne University of Technology, Melbourne  
*Exploring High- $z$  Black Hole–Bulge Relations With Semi-Analytics*
- February 2018** ANITA Theory Workshop  
Curtin University, Perth  
*Exploring High- $z$  Black Hole–Bulge Relations With Semi-Analytics*
- July 2017** Astronomical Society of Australia Annual Scientific Meeting  
Australian National University, Canberra  
*Triggering AGN in Galaxy Clusters*  
Bok Prize Talk

## Workshops & Training

- **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