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## Employment & Education

2020–present	<b>Research Associate (Plaskett Fellowship)</b>	<b>National Research Council of Canada</b> Herzberg Astronomy and Astrophysics, Dominion Astrophysical Observatory
2017–2020	<b>Doctor of Philosophy</b>	<b>University of Melbourne</b> <i>Thesis:</i> “The Host Galaxies of High-Redshift Quasars” <i>Supervisors:</i> Professor Stuart Wyithe, Dr Simon Mutch
2016	<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
2015–2017	<b>Diploma of Philosophy</b>	<b>University of Tasmania</b>
2013–2015	<b>Bachelor of Science</b>	<b>University of Tasmania</b> <i>GPA:</i> 7.0 (on a 7-point scale)

## Involvement in Observing Programs

- **PI**, JWST GO-1813: *Unveiling Stellar Light from Host Galaxies of  $z \sim 6$  Quasars*, (15.9 hours)
- **PI**, Gemini North NIRI AO, *Finding Suitable Stars to Help Uncover the Hosts of the First Quasars with JWST*, (1.33 hours DDT in 2021 and 0.45 hours FTT in 2022)
- **Co-I**, JWST GTO-1176: *Galaxy Assembly, Supermassive Blackhole Growth, First Light and Reionization Studies with the James Webb Space Telescope: Interdisciplinary Scientist for JWST*, PI Windhorst
- **Associate**, Galaxy Assembly IFS program, NIRSPEC GTO team
- **Co-I**, JWST GO-1764: *A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization*, PIs Fan, Yang & Banados
- **Co-I**, JWST GO-1554: *Nebular line diagnostics in a merger at cosmic dawn*, PI Decarli
- **Co-I**, HST GO 16252 and 16793: *TREASUREHUNT: Hubble’s UV-Visible treasury imaging of the JWST NEP Time-Domain Field*, PI Jansen

## Awards

- **Faculty of Science Postgraduate Writing-Up Award, The Albert Shimmins Fund**, University of Melbourne, 2020
- **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**, the highest undergraduate award, University of Tasmania (UTAS), 2017
- **Tasmania Honours Scholarship**, UTAS, 2016
- **Adrian La Palombara Annual Appeal Honours Scholarship in Physics**, UTAS, 2016
- **Dean’s Honour Roll for the Faculty of Science, Engineering and Technology**, UTAS, 2013–2016
- **Australian Institute of Physics Prize**, for greatest proficiency in final year undergraduate Physics, UTAS, 2015
- **Premier of Tasmania National Undergraduate Scholarship**, UTAS, 2013–2016

## Press Release & Media Highlights

- **James Webb Space Telescope: Round 2** (ft. Maddie Marshall & Benji Metha), Curiosity Killed the Rat science podcast, June 2022
- **Sneak Preview of Early Quasar Observations**, Physics magazine, Feb. 2022
- **Simulations Show Webb Telescope Can Reveal Distant Galaxies Hidden in Quasars' Glare**, STSci/NASA Press Release, Oct. 2020
- **Einstein-A-Go-Go Radio Interview**, RRR Melbourne, Nov. 2020
- **NASA's James Webb Telescope to Supersede Hubble Telescope Next Year**, Radio Interview at SYN Melbourne, Nov. 2020

## Selected Talks

Oct. 2021	<b>Astrophysics Colloquium</b> University of British Columbia, Vancouver, Canada (Remote)
June 2021	<b>European Astronomical Society Annual Meeting</b> Remote Conference
June 2021	<b>SAZERAC 2</b> Remote Conference
Dec. 2020	<b>SAZERAC: Quasars During Reionisation</b> Remote Conference
Oct. 2020	<b>DAO Astronomy Colloquium</b> NRC Herzberg, Victoria, Canada (Remote)
July 2020	<b>Astrophysics Seminar</b> University of Sussex, Brighton, UK (Remote)
Mar. 2020	<b>Black Holes and Galaxies at the Edge of the Universe</b> Ringberg Castle, Germany
Oct. 2019	<b>Cosmic Evolution of Quasars: From the First Light to Local Relics</b> Kavli Institute for Astronomy and Astrophysics, Peking University, Beijing, China
Aug. 2019	<b>Astrophysics Seminar</b> Carnegie Mellon University, Pittsburgh, USA
July 2019	<b>Barefoot Reionization: Exploring the First Billion Years of the Universe</b> Fitzroy Island, Queensland, Australia
July 2018	<b>Are AGN Special?</b> Durham University, Durham, United Kingdom
July 2018	<b>The Early Growth of Supermassive Black Holes</b> Sexten Center for Astrophysics, Sexten, Italy
June 2018	<b>Astronomical Society of Australia Annual Scientific Meeting</b> Swinburne University of Technology, Melbourne, Australia
July 2017	<b>Astronomical Society of Australia Annual Scientific Meeting</b> Australian National University, Canberra, Australia <i>Triggering AGN in Galaxy Clusters</i> Bok Prize Talk

## Selected Workshops & Conferences

- **2022 Canadian Space Exploration Workshop**, Virtual Conference, June 2022
- **Canadian Astronomical Society (CASCAS) 2022 AGM**, Virtual Conference, May 2022
- **Poster Symposium Targeting Early-career Researchers (PoSTER) - Poster competition winner**, Virtual Conference, May 2022
- **Canadian Astronomical Society (CASCAS) 2021 AGM**, Virtual Conference, May 2021
- **Galaxy Formation and Evolution in the Era of the Nancy Grace Roman Space Telescope**, Virtual Conference, July 2020
- **SAZERAC Summer All Zoom Epoch Of Reionization Astronomy Conference**, Virtual Conference, July 2020
- **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

## Selected Teaching, Outreach and Professional Activities

- **Member of the Astronomical Society of Australia, ASA**, 2017–present
- **Member of the Canadian Astronomical Society, CASCA**, 2021–present
- **Member of the ARC Centre of Excellence for All Sky Astrophysics in 3D, ASTRO 3D**, 2017–present
- **Tutor, Physical Cosmology (Masters level)**, University of Melbourne, 2018–2020
- **Lab Demonstrator, Third Year Laboratory and Computational Physics**, University of Melbourne, 2018–2019
- **Lab Demonstrator, First Year Physics (Advanced)**, University of Melbourne, Semester 2 2017
- **Invited school talks**, Riana Primary School, Smithton Primary School, and Smithton Rotary Club, Tasmania, 2018, 2019 and 2020
- **JWST Star Party public outreach event**, Friends of the Dominion Astrophysical Observatory, 2021
- **Herzberg Astronomy & Astrophysics Ambassador school talks**, Oak Bay High School, Victoria High School and Lambrick Park High School, Victoria BC, 2022
- **Up Close and BIG school careers talk**, Burnie Works, including primary and high schools throughout North West Tasmania, 2022

- Marshall, M. A.**, Watts, K\*, Wilkins, S., Di Matteo, T., Kuusisto, J. K., Roper, W. J., Vijayan, A. P., Ni, Y., Feng, Y., and Croft, R. A. C.: 2022, “*The BlueTides Mock Image Catalogue: Simulated observations of high-redshift galaxies and predictions for JWST imaging surveys*” Submitted to MNRAS, arxiv: 2206.08941.
- Roper, W. J., Lovell, C. C., Vijayan, A. P., **Marshall, M. A.**, Irodoutou, D., Kuusisto, J. K., Thomas, P. A., Wilkins, S.: 2022, “*First Light And Reionisation Epoch Simulations (FLARES) – IV. The size evolution of galaxies at  $z \geq 5$ .*” MNRAS 514, 2, 1921, DOI: 10.1093/mnras/stac1368.
- Marshall, M. A.**, Wilkins, S., Di Matteo, T., Roper, W. J., Vijayan, A. P., Ni, Y., Feng, Y., and Croft, R. A. C.: 2022, “*The Impact of Dust on the Sizes of Galaxies in the Epoch of Reionization.*” MNRAS 511, 4, 5475, DOI: 10.1093/mnras/stac380.
- Marshall, M. A.**, Wyithe, J. S. B., Windhorst, R. A., Di Matteo, T., Ni, Y., Wilkins, S., Croft, R. A. C., and Mechtley, M.: 2021, “*Observing the host galaxies of high-redshift quasars with JWST: predictions from the BlueTides simulation.*” MNRAS 506, 1, 1209, DOI: 10.1093/mnras/stab1763.
- Ren, K., Trenti, M., **Marshall, M. A.**, Di Matteo, T. and Ni, Y.: 2021, “*The Diversity of Environments Around Luminous Quasars at Redshift  $z \sim 6$ .*” ApJ 917 (2), 89, DOI: 10.3847/1538-4357/ac0ae2
- Marshall, M. A.**, Mechtley, M., Windhorst, R. A., Cohen, S. H., Jansen, R. A., Jiang L., Jones, V. R., Wyithe, J. S. B., Fan, X., Hathi, N. P., Jahnke, K., Keel, W. C., Koekemoer, A. M., Marian, V., Ren, K., Robinson, J., Röttgering, H. J. A., Ryan, Jr., R. E., Scannapieco, E., Schneider, D. P., Schneider, G., Smith, B. M., and Yan, H.: 2020, “*Limits to Rest-Frame Ultraviolet Emission From Far-Infrared-Luminous  $z \simeq 6$  Quasar Hosts.*” ApJ 900, 21 DOI: 10.3847/1538-4357/abaa4c.
- Marshall, M. A.**, Ni, Y., Di Matteo, T., Wyithe, J. S. B., Wilkins, S., and Croft R. A. C: 2020, “*The host galaxies of  $z = 7$  quasars: predictions from the BlueTides simulation.*” MNRAS 499, 3, 3819 DOI: 10.1093/mnras/staa2982.
- Marshall, M. A.**, Mutch, S. J., Qin, Y., Poole, G. B., and Wyithe, J. S. B.: 2020, “*Dark-ages Reionization and Galaxy Formation Simulation – XVIII. The high-redshift evolution of black holes and their host galaxies.*” MNRAS 494, 2747 DOI: 10.1093/mnras/staa936.
- 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.

\* Indicates a supervised student.