Erica Aileen Thygesen

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University of Tasmania Churchill Avenue Sandy Bay, Hobart 7001

EMPLOYMENT

University of Tasmania, Hobart, Tasmania

Research Fellow in Physics - Astronomy, March 2025 - current Project: Lifting the Veil on Cold Planets in the Inner Galaxy

P.I. Dr Andrew Cole and Dr Jean-Philippe Beaulieu

EDUCATION

Michigan State University, East Lansing, MI

Ph.D., Astronomy and Astrophysics, 2019 - March 2025

Advisor 2021-2025: Dr Joseph Rodriguez

Dissertation: The K2 & TESS Synergy: Uniting NASA's Planet Hunters

Advisor 2019-2021: Dr Stephen Zepf

GPA: 3.892 (out of 4)

Project: Globular Cluster Ultraluminous X-ray Sources in the Furthest Early-Type Galaxies

International Centre for Radio Astronomy Research

Curtin University, Perth, Western Australia

Bachelor of Science (Honours), Astronomy, 2017 - 2018 Supervisors: Dr Richard Plotkin and Dr Gemma Anderson

Project: A Chandra Search for X-ray Ionized Nebulae in the Local Universe

First Class Honours with course weighted average of 86

University of Western Australia, Crawley Campus, Perth, Western Australia

Bachelor of Science, 2013 - 2016

First major in Physics Second major in Music GPA: 6.042 (out of 7)

Research EXPERIENCE Swinburne Vacation Scholarship

Dec 2017 - Feb 2018, Jul - Aug 2018

Centre for Astrophysics & Supercomputing

Swinburne University of Technology, Hawthorn Campus

Supervisor: Dr Sarah Sweet

Project: The Chemical Content of Galaxies Near and Far

ICRAR/Pawsey Summer Studentship

Dec 2016 - Feb 2017

July 2025

May 2025

March 2024

International Centre for Radio Astronomy Research

Curtin University

Supervisors: Dr Richard Plotkin and Dr Roberto Soria

Project: A Multiwavelength Search for Black Holes in Nearby Dwarf Galaxies

PRESENTATIONS

• Astronomical Society of Australia Annual Scientific Meeting (oral presentation)

• UTas Inclusion, Diversity and Equity Share Your Story event June 2025

• University of Tasmania seminar

November 2024 • 10th Australian Exoplanet Workshop

• Extreme Solar Systems V (poster)

• Great Lakes Exoplanet Area Meeting (GLEAM) Nov 2022, Oct 2023

• ERES Symposium

June 2023 • MIT Kavli Institute's Monday Afternoon Talk series April 2023

• Center for Astrophysics | Harvard & Smithsonian seminar March 2023

• NASA JPL Virtual Exoplanet Lecture Series March 2023

• 241st meeting of the American Astronomical Society Jan 2023 (oral presentation)

Nov 2022 • Michigan State University seminar

• Emerging Researchers in Exoplanet Science (ERES) Symposium Aug 2022

	• University of Southern Queensland Astromeeting	July 2022
	• TESS Science Team Meeting #27 (virtual)	Jan 2022
	• Compact Objects in Michigan/Ontario (virtual)	May 2021
	• Astronomical Society of Australia Annual	June 2018 & 2022
	Scientific Meeting (poster sparkler)	
	• Swinburne studentship presentation	Feb 2018
	• ICRAR Student Day	Dec 2017
	• Honours Talk	Oct 2017
	• ICRAR-Con	Sep 2017
	• Final ICRAR/Pawsey studentship presentation (×2)	Feb 2017
	• First ICRAR/Pawsey studentship presentation $(\times 2)$	Dec 2016
Outreach	• Guest on episode 283 of That's What I Call Science podcast	May 2025
	• International Asteroid Day at the MSU Observatory	June 2023
	• Astrofest general volunteer	March 2017 & 2018
Academic Service	Graduate Student Representative for the MSU Astronomy Seminar Committee	2021-2024
Technical Skills • Exoplanet fitting (exofastv2) • X-ray data analysis (ciao) • Radio data analysis (casa) • Optical spectroscopy (standard tools for AAO including 2DFDR, SAMI Python manager and lzifu) • Green II and OzSTAR Supercomputers, Swinburne University • HPCC supercomputer, ICER, Michigan State University • Linux, Python, Latex, Topcat		
Teaching Experience	Advisor to undergraduate student	2023
	 Teaching Assistant (Michigan State University) ◆ Visions of the Universe ISP205L (~50 students) ◆ Planets and Telescopes AST208 (~ 30 students) 	2019-2020 2021
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AWARDS

Music Tutor (Mandurah Catholic College, Australia) • MSU NatSci Awesome Graduate Student Award (2600 USD) 2024 • Quad Fellowship (50,000 USD over one year) 2023-2024 • MSU Physics and Astronomy Department's 2020 Outstanding Graduate Teaching Assistant Award (200 USD) • Curtin University Student Achievement Award 2018 • John de Laeter Medal 2018 • Certificate of Excellence, Australian Music Examinations Board 2015

Feb 2016 - June 2018

Publications

- 1. "The K2 & TESS Synergy III: Search and Rescue of the Lost Ephemeris for K2's First Planet", Thygesen, E., Rodriguez, J. E., De Beurs, Z. L., et al., 2024, The Astronomical
- "The K2 & TESS Synergy II: Revisiting 26 systems in the TESS Primary Mission", Thygesen, E., Ranshaw, J. A., Rodriguez, J. E., et al., 2023, The Astronomical Journal
- 3. "Multiwavelength scrutiny of X-ray sources in dwarf galaxies: ULXs versus AGNs", Thygesen, E., Plotkin, R. M., Soria, R., Reines, et al., 2023, Monthly Notices of the Royal Astronomical Society
- 4. "Globular Cluster Ultraluminous X-ray Sources in the Furthest Early-Type Galaxies", Thygesen, E., Sun, Y., Huang, J., et al., 2023, Monthly Notices of the Royal Astronomical Society
- 5. "Characterization of K2-167 b and CALM, a new stellar activity mitigation method". De Beurs, Z. L., Vanderburg, A., Thygesen, E., et al., 2024, Monthly Notices of the Royal Astronomical Society
- "Another Shipment of Six Short-Period Giant Planets from TESS", Rodriguez, J. E., Quinn, S. N., Vanderburg, A., Zhou, G., Eastman, J. D., Thygesen, E., et al., 2023, Monthly Notices of the Royal Astronomical Society
- 7. "X-ray spectroscopy of newly identified ULXs associated with M87's globular cluster

population", Dage, K. C., Zepf, S. E., **Thygesen, E.**, et al., 2020, *Monthly Notices of the Royal Astronomical Society*

- 8. "Three ultraluminous X-ray sources hosted by globular clusters in NGC 1316", Dage, K. C., Kundu, A., Thygesen, E., et al., 2021, Monthly Notices of the Royal Astronomical Society
- 9. "Ultraluminous X-ray sources in seven edge-on spiral galaxies", Dage., K. C., Vowell, N., Thygesen, E., et al., 2021, Monthly Notices of the Royal Astronomical Society

TELESCOPE TIME Co-investigator

• Very Large Array, VLA/22A-140

2022

 \bullet Hubble Space Telescope Cycle 28, ID. #16160, Zepf et al.

2020