

# Erica Aileen Thygesen

Michigan State University  
567 Wilson Road  
East Lansing, MI 48824

E-mail: thygesen@msu.edu

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## EDUCATION

**Michigan State University**, East Lansing, MI

Ph.D., Astronomy and Astrophysics, 2019-2024

Advisor 2021- : Dr Joseph Rodriguez

Planned dissertation: *K2 & TESS Synergy*

Advisor 2019-2021: Dr Stephen Zepf

GPA: 3.892 (out of 4)

**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

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

- GLEAM October 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 (oral presentation) January 2023
- Great Lakes Exoplanet Area Meeting (GLEAM) November 2022
- Michigan State University seminar November 2022
- Emerging Researchers in Exoplanet Science (ERES) Symposium August 2022
- University of Southern Queensland Astromeeeting July 2022
- TESS Science Team Meeting #27 (virtual) January 2022
- Compact Objects in Michigan/Ontario (virtual) May 2021
- Astronomical Society of Australia Annual Scientific Meeting (poster sparkler) June 2018 & 2022
- Swinburne studentship presentation Feb 2018
- ICRAR Student Day Dec 2017

	<ul style="list-style-type: none"> <li>• Honours Talk</li> <li>• ICRAR-Con</li> <li>• Final ICRAR/Pawsey studentship presentation (<math>\times 2</math>)</li> <li>• First ICRAR/Pawsey studentship presentation (<math>\times 2</math>)</li> </ul>	<p>Oct 2017</p> <p>Sep 2017</p> <p>Feb 2017</p> <p>Dec 2016</p>
OUTREACH	<ul style="list-style-type: none"> <li>• International Asteroid Day at the MSU Observatory</li> <li>• Astrofest general volunteer</li> </ul>	<p>June 2023</p> <p>March 2017 &amp; 2018</p>
ACADEMIC SERVICE	Graduate Student Representative for the MSU Astronomy Seminar Committee	2021-2023
TECHNICAL SKILLS	<ul style="list-style-type: none"> <li>• Exoplanet fitting (EXOFASTV2)</li> <li>• X-ray data analysis (CIAO)</li> <li>• Radio data analysis (CASA)</li> <li>• Optical spectroscopy (standard tools for AAO including 2DFDR, SAMI Python manager and LZIFU)</li> <li>• Green II and OzSTAR Supercomputers, Swinburne University</li> <li>• HPC supercomputer, ICER, Michigan State University</li> <li>• Linux, Python, <math>\LaTeX</math></li> </ul>	
TEACHING EXPERIENCE	<p><b>Advisor to undergraduate student</b></p> <p><b>Teaching Assistant</b> (Michigan State University)</p> <ul style="list-style-type: none"> <li>• Visions of the Universe ISP205L (<math>\sim 50</math> students)</li> <li>• Planets and Telescopes AST208 (<math>\sim 30</math> students)</li> </ul> <p><b>Music Tutor</b> (Mandurah Catholic College, Australia)</p>	<p>2023</p> <p>2019-2020</p> <p>2021</p> <p>Feb 2016 - June 2018</p>
AWARDS	<ul style="list-style-type: none"> <li>• Quad Fellow</li> <li>• MSU Physics and Astronomy Department's Outstanding Graduate Teaching Assistant Award</li> <li>• Curtin University Student Achievement Award</li> <li>• John de Laeter Medal</li> <li>• Certificate of Excellence, Australian Music Examinations Board</li> </ul>	<p>2023-2024</p> <p>2020</p> <p>2018</p> <p>2018</p> <p>2015</p>
PUBLICATIONS	<p>“The K2 &amp; TESS Synergy III: Search and Rescue of the Lost Ephemeris for K2’s First Planet”, <b>Thygesen, E.</b>, Rodriguez, J. E., De Beurs, Z. L., et al., <i>Submitted to AAS Journals</i></p> <p>“The K2 &amp; TESS Synergy II: Revisiting 26 systems in the TESS Primary Mission”, <b>Thygesen, E.</b>, Ranshaw, J. A., Rodriguez, J. E., et al., 2023, <i>The Astronomical Journal</i></p> <p>“Multiwavelength scrutiny of X-ray sources in dwarf galaxies: ULXs versus AGNs”, <b>Thygesen, E.</b>, Plotkin, R. M., Soria, R., Reines, et al., 2023, <i>Monthly Notices of the Royal Astronomical Society</i></p> <p>“Globular Cluster Ultraluminous X-ray Sources in the Furthest Early-Type Galaxies”, <b>Thygesen, E.</b>, Sun, Y., Huang, J., et al., 2023, <i>Monthly Notices of the Royal Astronomical Society</i></p> <p>“Another Shipment of Six Short-Period Giant Planets from TESS”, Rodriguez, J. E., Quinn, S. N., Vanderburg, A., Zhou, G., Eastman, J. D., <b>Thygesen, E.</b>, et</p>	

al., 2023, *Monthly Notices of the Royal Astronomical Society*

“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*

“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*

“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
	• Hubble Space Telescope Cycle 28, ID. #16160, Zepf et al.	2020