

# Robert Frazier

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[LinkedIn](#)

[Personal Site](#)

## EDUCATION

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### The University of Michigan

Ph.D in Astronomy

Ann Arbor, MI

August 2023 - May 2028 (Expected)

### The Pennsylvania State University

*Eberly College of Science, Schreyer Honors College*

University Park, PA

August 2019 - May 2023

B.S. with Honors in Astronomy and Astrophysics and B.S. in Physics. Minor in Mathematics.

## RESEARCH EXPERIENCE

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### University of Michigan

*Graduate Research with Advisor Emily Rauscher*

Ann Arbor, MI

August 2023 - Now

- Working on comparing simulated spectroscopic phase curves from 3D climate models to observations of ultra hot Jupiters in order to probe planetary dynamics and contents.

### The Pennsylvania State University

*Research Assistant/Schreyer Honors College Thesis Research*

University Park, PA

March 2022 - April 2023

- Characterized exoplanet architecture via analysis of extremely precise radial velocity data and the Rossiter-McLaughlin effect with Suvrath Mahadevan and Guðmundur Stefánsson.

### The Pennsylvania State University

*Research Assistant*

University Park, PA

May 2021 - October 2021

- Developing radio interferometry imaging Python package “MPoL” with Ian Czekala. Improved accessibility features through tutorials and optimized the resource usage and run time of the package.

## PUBLICATIONS, PRESENTATIONS, SOFTWARE

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[Frazier, R., Stefansson, G., Mahadevan, S. et al. 2023, ApJL](#)

*NEID Reveals that The Young Warm Neptune TOI 2076b Has a Low Obliquity*

[Lin, Andrea S. J. et al. incl Frazier, R. 2023. AJ](#)

*The Unusual M-dwarf Warm Jupiter TOI-1899 b: Refinement of Orbital and Planetary Parameters*

[Zawadzki, B. et al. incl Frazier, R. 2023, PASP](#)

*Regularized Maximum Likelihood Image Synthesis and Validation for ALMA Continuum Observations of Protoplanetary Disks*

[Czekala, I. et al. incl Frazier, R. 2021](#)

*MPoL-dev/MPoL: v0.1.1*

**PhysCon 2022 Finalist Presenter and APS Mid-Atlantic Meeting Poster Presentation**

*NEID Reveals that The Young Warm Neptune TOI 2076b Has a Low Obliquity*

## INVOLVEMENT & OUTREACH

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### Undergraduate Liaison

August 2023 - Now

- Serve as coordinator for events between grad and undergrad students in the UMich Astronomy department. Served as mentor to groups of undergrads.

### Society of Physics Students (SPS)

August 2019 - May 2023

- President for 22-23 Year (Plan and run meetings, outings, events, and coordinate all officers)
- Vice President for 21-22 Year (Ran outreach events, outings, and general meetings)
  - Directed and wrote “Magic Show” physics outreach play for 200+ visitors
- Buildmaster for 20-21 Year (Planned and prepared physics related builds)

**Physics and Astronomy for Women+ (PAW+)**

August 2022 - May 2023

- Web Chair for 22-23 Year (Maintain and update website)

**PSU Conference for Undergraduate Women in Physics Planning Committee**

June 2022 - Jan 2023

- Created and updated website for event, gathered information and resources to be displayed on it
- Contacted all PA and western VA SPS chapters to invite to event in role as SPS President

**APS IDEA Team**

March 2022 - May 2023

- Work to change the climate in the Physics department and promote diversity, equity, and inclusion.

**APS Climate Site Visit Team**

March 2022 - March 2023

- Gather information and provide feedback and insight from undergrad level.

**Upper Dublin School District**

Fort Washington, PA

*Internship with Science Curriculum Director/Planetarium Director*

May 2019 - June 2019

- Participated in evaluation and curriculum meetings. Helped with curriculum organization.
- Ran planetarium programs and presentations throughout the school district.

**AWARDS AND HONORS**

**Mercedes T. Richards Memorial Scholarship (PSU-Astronomy)**

Awarded 2022-2023

**John and Elizabeth Holmes Teas Scholarship (PSU-Physics)**

Awarded 2021-2023

**Sigma Pi Sigma**

Inducted April 2021

**The President’s Freshman Award (PSU)**

Awarded 2020

**Braddock Scholarship (PSU-Eberly College of Science)**

Awarded 2019-2023