

RAMISA AKTHER RAHMAN

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EDUCATION

Yale University , New Haven, CT	2024 – Present
– Ph.D. in Astronomy (Expected 2030)	
College of William & Mary , Williamsburg, VA	2020 – 2024
– B.S. in Physics with Departmental Honors, Minor in English	
– Honors Thesis: <i>Faraday Rotation Results Associated with the Photoionized Gas of IC 1396</i>	
Advisors: Dr. Allison Costa, Prof. Irina Novikova	
– Dean's List Spring 2024, Fall 2023, Spring 2023, Fall 2022, Spring 2021	

RESEARCH EXPERIENCE

Graduate Researcher , Yale Astronomy Department	Fall 2024 – Present
Advisor: Prof. Héctor Arce	
Summer Researcher (Post-bacc) , Center for Astrophysics Harvard & Smithsonian	Summer 2024
Advisors: Dr. Joshua Bennett Lovell, Dr. Kristina Monsch, Dr. David J. Wilner, Dr. Alice Booth	
Undergraduate Researcher (NSF REU) , Smithsonian Astrophysical Observatory	2023 – 2024
Advisors: Dr. Joshua Bennett Lovell, Dr. David J. Wilner, Dr. Eric Koch	
Undergraduate Researcher (NSF REU) , National Radio Astronomy Observatory (NRAO)	2022 – 2024
Advisor: Dr. Allison Costa	
Undergraduate Researcher , William & Mary Quantum & Optics Research Group	2021 – 2022
Advisors: Prof. Irina Novikova, Prof. Eugeniy Mikhailov	
Undergraduate Research Assistant , William & Mary Planetary Research Group	June 2021 – August 2021
Advisors: Dr. Jonathan Kay, Mikayla Huffman (graduate student at CU Boulder)	

PUBLICATIONS

2. **Rahman, R. A.**, Lovell, J. B., Koch, E. W., Wilner, D. J., Andrews S. M., Monsch, K., Ha, D. 2025, *ApJ*, 981, 68. *The Radiowave Hunt for Young Stellar Object Emission and Demographics (RADIOHEAD): A Radio Luminosity–Spectral Type Dependence in Taurus–Auriga YSOs*
1. Lovell, J. B., Keating, K. G., Andrews S. M., MacGregor, M., **Rahman, R. A.**, Rao R., Williams J. P. 2024, *ApJL*, 962, L12. *SMA Detection of an Extreme Millimeter Flare from the Young Class III Star HD 283572*

AWARDS, SCHOLARSHIPS AND HONORS

Physics Undergraduate Research Prize , William & Mary	2024
NSF Graduate Research Fellowship Honorable Mention	2024
Chambliss Poster Competition Finalist , American Astronomical Society (AAS) 243 rd Meeting	2024
Charles Center Semester Research Grant , William & Mary	2023
2nd Place (Honorable Mention) , William & Mary 2023 Physics Fest Lightning Talk	2023
Virginia Space Grant Consortium Undergraduate STEM Research Scholarship	2023
Virginia State Scholarship Fund Scholarship for Women in Higher Education	2023, 2021

Mentoring for Careers in Physics Mentee Travel Support Award , William & Mary	2023
Best Astrophysics Poster Prize , Conference for Undergraduate Women in Physics, Princeton University	2023

PRESENTATIONS

Talks:

- **Northeast Star & Planet Formation Meeting**, MIT Haystack Observatory July 2024
RADIOHEAD: The Radiowave Hunt for young stellar object Emission And Demographics
- **Physics Honors Thesis Talk**, William & Mary May 2024
Faraday Rotation Results Associated with the Photoionized Gas of IC 1396
- **Mid-Year Physics Honors Thesis Talk**, William & Mary December 2023
Faraday Rotation Results Associated with the Photoionized Gas of IC 1396
- **W&M 2023 Physics Fest Student Lightning Talk**, William & Mary October 2023
RADIOHEAD: The Radiowave Hunt for young stellar object Emission And Demographics
- **Astrophysics REU Summer Symposium**, Center for Astrophysics | Harvard & Smithsonian August 2023
RADIOHEAD: The Radiowave Hunt for young stellar object Emission And Demographics
- **W&M 2023 Physics Undergraduate Research Showcase**, William & Mary April 2023
Faraday Rotation Results Associated with the Photoionized Gas of IC 1396
- **W&M Scholars Undergraduate Research Experience 3rd Annual Undergraduate Research Conference**, William & Mary April 2023
Faraday Rotation Results Associated with the Photoionized Gas of IC 1396
- **W&M 2022 Physics Fest Lightning Talk**, William & Mary October 2022
Faraday Rotation Results Associated with the Photoionized Gas of IC 1396
- **Summer Student Research Symposium**, National Radio Astronomy Observatory (NRAO) August 2022
Faraday Rotation Results Associated with the Photoionized Gas of IC 1396
- **W&M 2022 Physics Undergraduate Research Showcase**, William & Mary April 2022
Acousto-Optic Modulator Optimization

Posters:

- **Gordon Research Conference 2025 Origins of the Solar System**, Mount Holyoke College June 2025
RADIOHEAD: The Radiowave Hunt for young stellar object Emission And Demographics
- **Gordon Research Seminar 2025 Origins of the Solar System**, Mount Holyoke College June 2025
RADIOHEAD: The Radiowave Hunt for young stellar object Emission And Demographics
- **Virginia Space Grant Consortium Student Research Conference**, Newport News, VA April 2024
Faraday Rotation Results Associated with the Photoionized Gas of IC 1396
- **2024 American Physical Society March Meeting**; Virtual March 2024
Faraday Rotation Results Associated with the Photoionized Gas of IC 1396
- **American Astronomical Society (AAS) 243rd Meeting**, New Orleans, LA January 2024
RADIOHEAD: The Radiowave Hunt for young stellar object Emission And Demographics
- **Conference for Undergraduate Women in Physics**, Princeton University January 2023
Faraday Rotation Results Associated with the Photoionized Gas of IC 1396
- **American Astronomical Society (AAS) 241rd Meeting**, Seattle, WA January 2023
Faraday Rotation Results Associated with the Photoionized Gas of IC 1396

OBSERVATIONS

Accepted Proposals:

- Submillimeter Array (SMA) - 30 hours awarded (CoI Rahman, PI Lovell)
Millimeter follow-up of radio-detected YSO multiples: Is stellar multiplicity driving class III millimeter variability? (2023B-S038)

Observing Experience:

- Palomar 200-in Telescope (WIRC+Pol) - 3 nights (2024B)
- Keck Observatory (OSIRIS) - 1 night (2024B)

TEACHING EXPERIENCE

Teaching Fellow, Yale University

- ASTR 210: Stars and their Evolution (Prof. Robert Zinn) Fall 2024
- ASTR 120: Galaxies and the Universe (Dr. Michael Faison) Spring 2025

ATTENDED WORKSHOPS

2025 Summer School in Statistics for Astronomers, Center for Astrostatistics at The Pennsylvania State University Jun 2025

ALMA Data Calibration & Analysis Workshop, Center for Astrophysics | Harvard & Smithsonian Oct 2024

OUTREACH AND SERVICE

Talks:

- **AstroSibs Professional Development Summer Research Info Session**, Yale Astronomy Department December 2024
How to Apply to REUs
- **Mentoring for Careers in Physics (MCP) Workshop**, William & Mary November 2023
Applications & Opportunities (Internships & Research)

Professional:

- **Astronomy Student Council**, Yale Astronomy Department August 2025 – Present
Member (as GSA Representative)
- **Graduate Student Assembly Representative**, Yale University Graduate School of Arts & Sciences May 2025 – Present
Astronomy Department Representative
- **Exoplanet & Stars Seminar**, Yale Astronomy Department May 2025 – Present
Seminar co-organizer
- **Astronomy Committee on Diversity and Climate**, Yale Astronomy Department September 2024 – Present
Department Member
- **Committee on the Status of Minorities in Astronomy (CSMA)**, AAS October 2023 – Present
Member

Community:

- **South Asian Student Association**, William & Mary
Member August 2020 – May 2024
 - **First Generation & Low Income Student Organization**, William & Mary
Member August 2020 – May 2024
 - **Muslim Student Association**, William & Mary
Member August 2020 – May 2024

MEDIA COVERAGE

Navigating a future studying stars: W&M student co-authors prestigious astrophysics study, William & Mary News February 2024

Extreme Eruption on Young Sun-like Star Signals Savage Environment for Developing Exoplanets, Center for Astrophysics | Harvard & Smithsonian News Release February 2024