

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: *Faraday Rotation Results Associated with the Photoionized Gas of IC 1396*
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 2025 – Present
Advisor: Prof. Earl Bellinger, Dr. Ebraheem Farag
- 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)**, Center for Astrophysics | Harvard & Smithsonian 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. Eugeny 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

- Graduate Student Assembly Conference Travel Fellowship**, Yale University 2026
- Physics Undergraduate Research Prize**, William & Mary 2024
- NSF Graduate Research Fellowship Honorable Mention** 2024
- Chambliss Poster Competition Finalist**, American Astronomical Society (AAS) 243rd Meeting 2024

Charles Center Semester Research Grant, William & Mary	2023
2 nd 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:

- **Yale Astronomy and Earth and Planetary Science (EPS) Crossover Series**, Yale University Apr 2026
OSTrich (Orion Streamers from TROOPICAL): A Study of Asymmetric Infall in Protostars
- **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), 3 nights (2025B)
- Keck Observatory (OSIRIS) - 1 night (2024B)

TEACHING EXPERIENCE

Teaching Fellow, Yale University

- ASTR 1100: Stars and Planets (Dr. Michael Faison) Fall 2025
- ASTR 120: Galaxies and the Universe (Dr. Michael Faison) Spring 2025
- ASTR 210: Stars and their Evolution (Prof. Robert Zinn) Fall 2024

ATTENDED WORKSHOPS

- 21st NRAO Synthesis Imaging Workshop**, New Mexico Tech Jun 2026
- 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
Member
- **Committee on the Status of Minorities in Astronomy (CSMA)**, AAS October 2023 – Present
Member
- **Mentoring for Careers in Physics (MCP) Organization**, William & Mary December 2021 – May 2024
Member
- **Society of Physics Students**, William & Mary August 2020 – May 2024
Member
- **College of Arts & Sciences Faculty Hire Committee**, William & Mary January 2023 – March 2023
Undergraduate Representative

Community:

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

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

PROGRAMMING SKILLS

Programming Languages	Python, C++, Fortran
ML & Stats Tools / Relevant Packages	scikit-learn, NumPyro, PyTorch, astropy
Astronomy Software	CARTA, CASA, SAOImage DS9, TOPCAT
Web Development	HTML, CSS, Jekyll