

# Kaila Ronayne

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 (LinkedIn)  (Github) (Personal Website) (ADS Library)

## RESEARCH INTERESTS

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Observational astronomy, high  $z$  universe, galaxy-formation, galaxy cluster, protoclusters, star formation, star formation history, galaxy evolution, active galactic nuclei (AGN), polycyclic aromatic hydrocarbons (PAHs)

## EDUCATION

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### PhD Astronomy

*Astrostatistics Track*

Texas A&M University, College Station, TX

Advisor: Casey Papovich

Expected Graduation: Aug-2028

### M.S. Astronomy

Texas A&M University, College Station, TX

Advisor: Casey Papovich

Expected Graduation: May-2025

### B.S. Aerospace Engineering

*Minors in Astrophysics and Mathematics*

Texas A&M University, College Station, TX

Graduated: Dec-2021

## RESEARCH APPOINTMENTS

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### Graduate Student

Texas A&M University

Department of Physics and Astronomy

Advisor: Casey Papovich

Jan 2022 - Present

### Assistant Researcher

Texas A&M University

Department of Physics and Astronomy

Advisors: Casey Papovich and Guang Yang

Aug 2020 - Dec 2021

### Assistant Researcher

Texas A&M University

Department of Aerospace Engineering

Research Group: SpaceCRAFT

Advisor: Gregory E. Chamitoff

May 2018 - May 2019

## INTERNSHIPS

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### Airworthiness Intern

Lockheed Martin, Fort Worth, TX

- Used software skills to optimize current data analysis methods. Aim was to improve previous methods of data processing to increase efficiency of work on the airworthiness team, as well as the chief engineers office.

May 2021 – Dec 2021

## PUBLICATIONS

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### First Author

- CEERS: 7.7  $\mu\text{m}$  PAH Star Formation Rate Calibration with JWST MIRI; Ronayne et al. 2024

### Co-Author

- CEERS: Spatially Resolved UV and mid-IR Star Formation in Galaxies at  $0.2 < z < 2.5$  The Picture from the Hubble and James Webb Space Telescopes; [Shen et al. 2023](#)
- CEERS: Increasing Scatter along the Star-Forming Main Sequence Indicates Early Galaxies Form in Bursts; [Cole et al. 2023](#)

### Contributing Author

- A Long Time Ago in a Galaxy Far, Far Away: A Candidate  $z \sim 14$  Galaxy in Early JWST CEERS Imaging; [Finkelstein et al. 2022](#)
- A dusty starburst masquerading as an ultra-high redshift galaxy in JWST CEERS observations; [Zavala et al 2022](#)

### HONORS AND AWARDS

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<b>Avilés-Johnson Doctoral Fellowship</b> <i>Awarded \$184,733</i>	Jan.2022–Aug.2027
<b>NASA/ Texas Space Grant Consortium Fellowship</b> <i>Awarded \$5,000</i>	2022–2023
<b>Graduate Student Research and Presentation Travel Award</b> <i>Awarded \$1,000</i>	Feb.2025

### AWARDED TIME/ARCHIVAL FUNDING

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<b>(CO-I) JWST Cy3 AR-5075</b> <i>Unveiling the Morphological Evolution of Galaxies in Protoclusters: Insights from JWST Imaging</i>
<b>(CO-I) JWST Cy2 GO-3794</b> <i>MEGA Mass Assembly at Cosmic Noon: MIRI EGS Galaxy and AGN Survey</i>

### CERTIFICATIONS

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<b>An Introduction to Evidence-Based Undergraduate STEM Teaching</b> <i>Certification of Completion (<a href="#">Certification Link</a>)</i>	Apr.2024
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### PRESENTATIONS

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#### Talks

• Texas A&M Astro-symposium	Aug.–2022
• Astronomy on Tap - Bryan College Station (AoT BCS)	Oct.–2022
• CEERS Team Meeting	May–2023
• Texas A&M Astro-symposium	Aug.–2023
• Astronomy on Tap - Bryan College Station (AoT BCS)	Feb.–2024
• STSci Spring Symposium	Apr.–2024
• CEERS Team Meeting	May–2024
• Brazos Valley Astronomy Club	June–2024
• Texas A&M Astro-symposium	Aug.–2024
• ( <i>Invited</i> ) TAMU Department of Atmospheric Sciences Seminar Series	Sept.–2024

#### Posters

• Bashfest Symposium at University of Texas at Austin	Oct.–2023
• American Astronomical Society (AAS) 243rd meeting	Jan.–2024
• STSci Spring Symposium	Apr.–2024
• Crisol 2025: Galaxy Origins in the JWST Era	May–2025

### COLLABORATIONS

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Cosmic Evolution Early Release Science ([CEERS](#)) Survey, JWST/MIRI EGS Galaxy and AGN (MEGA) Survey, Charting Cluster Construction with VUDS and ORELSE ([C3VO](#)) Survey

## LEADERSHIP

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MAGIC* Coordinator	Aug.2023–Nov.2024
Astronomy on Tap - Bryan College Station - Treasurer	Aug.2022–Nov.2024

## MENTORSHIP/OUTREACH

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MAGIC* Graduate Student Mentor	Aug.2022–Nov.2024
Adopt-a-Physicist <sup>†</sup>	Oct.2024–

## TEACHING

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### Teaching Assistant

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|--------------------------------|-----------------------|
| • INTRO GALAXIES AND COSMOLOGY | Spring 2022           |
| • OVERVIEW OF MODERN ASTRONOMY | Fall 2022–Spring 2023 |
| • STARS AND EXTRASOLAR PLANETS | Fall 2023             |

## PROGRAMMING

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**Fluent:**Python, LaTeX, Linux, Unix

**Experience:** MATLAB, Robot C, Visual Basic for Applications (VBA), bash, R, HTML, Image Reduction and Analysis Facility (IRAF)

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\*Mentoring And Advising Graduates In An Inclusive Community (MAGIC)

<sup>†</sup>See more about Adopt-a-Physicist