

Jenny K. Calahan

Origins of Life Fellow

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Ph.D. Astronomy & Astrophysics – Education –

NASA FINESST Grant Recipient and NSF GRFP Fellow

Ann Arbor, MI | Summer 2023

UNIVERSITY OF MICHIGAN

Thesis: Constraining Protoplanetary Disk Environments with ALMA

B.S. Astronomy with Honors

Tucson, AZ | May 2018

UNIVERSITY OF ARIZONA

Thesis: Constraining Massive Star Formation

B.S. Physics

Tucson, AZ | May 2018

UNIVERSITY OF ARIZONA

– Publication List –

First Author Papers (7)

- Calahan, Bergin et al.: *Complex Organics Surrounding the FU Ori-Type Object V1057 Cyg Indicative of Sublimated Ices*, published September 2024
- Calahan, Bergin et al.: *High Mass Inner Regions Found in Five Outbursting Sources*, published May 2024
- Calahan, Bergin, et al: *UV-Chemistry as a Signpost for the Late Stages of Planet Formation* - Accepted to Nature Astronomy, published Dec 8th, 2022
- Calahan, Bergin, and Bosman 2022: *Water UV-shielding in the Terrestrial Planet-forming Zone: Implications for Oxygen-18 Isotope Anomalies in H₂18O Infrared Emission and Meteorites*
- Calahan, Bergin, Zhang et al. 2021b: *Molecules with ALMA at Planet-forming Scales (MAPS) XVII: Determining the 2D Thermal Structure of HD 163296*
- Calahan, Bergin, Zhang et al. 2021a: *The TW Hya Rosetta Stone Project III: Resolving the Gasose Thermal Profile of the Disk*
- Calahan, Shirley, Svoboda et al. 2018: *Searching for Inflow Toward Massive Starless Clump Candidates Identified in the Bolocam Galactic Plane Survey*

Upcoming First Author Papers (1)

- Calahan, Öberg et al.: *The Radiative Environment's Impact on the Chemistry Available to the Terrestrial-Planet Forming Zone* - In progress

Selected Co-Authored Works (total 17)

- Bergin et al. 2024 (incl. Calahan): *The Carbon Isotopic Ratio and Planet Formation*
- Pontoppidan et al. 2024 (incl. Calahan): *High-contrast JWST-MIRI Spectroscopy fo Planet-roming Disks for the JDISC Survey*
- Bosman, Bergin, Calahan et al. 2022: *Water UV-shielding in the Terrestrial Planet-forming Zone: Implications for Carbon Dioxide Emission*
- Bosman, Bergin, Calahan, et al. 2022: *Water UV-shielding in the Terrestrial Planet-forming Zone: Implications from Water Emission*
- Schwarz, Calahan, Zhang et al. 2021: *Molecules with ALMA at Planet-forming Scales (MAPS) XX The Massive Disk around GM Aurigae*
- Öberg et al. 2021 (incl. Calahan) *Molecules with ALMA at Planet-forming Scales (MAPS I) Program Overview and Highlights*
- Cleeves et al. 2021 (incl. Calahan) *The TW Hya Rosetta Stone Project IV: A Hydrocarbon-rich Disk Atmosphere*
- Impey, Wenger, Austin, Calahan, and Danehy 2018 *Videos for Astronomy Education and Outreach*

– Mentorship Experience –

Tarisai Dziire - Smithsonian Astrophysical Observatory Research Experience for Undergrads	Summer 2024
David DeOcampo - Undergraduate at the University of Michigan	Spring 2023
Ty Walker - Undergraduate Research Opportunities Program, Community College	Summer 2022

– Selected Invited and Accepted Talks –

Born in Fire Conference - <i>Accepted</i>	2024
UMass Lowell Star & Science Seminar - <i>Invited</i>	2024
5 Colleges Star & Planet Formation Seminar - <i>Invited</i>	2024
IRAM & Wisconsin Radio Seminar - <i>Invited</i>	2024
50 Years of Astrochemistry in Protoplanetary Disks - Ringberg Conference - <i>Invited</i>	2024
MIT Planetary Seminar - <i>Invited</i>	2023
Yale Exoplanets & Stars Seminar - <i>Invited</i>	2023
University of Wisconsin Science Seminar - <i>Invited</i>	2023
SMA Seminar - <i>Invited</i>	2022
University of Virginia Astrochemistry Group VICO Workshop, Speaker - <i>Invited</i>	2022
Space Telescope Science Institute Star and Planet Formation Group Talk, Speaker	2022
Clouds to Planets II, Speaker - <i>Applied and Accepted</i>	2022
University of Pittsburg Physics Department, Journal Club - <i>Invited</i>	2022
Flatiron Center for Computational Astrophysics, Journal Club - <i>Invited</i>	2022
CIERA - Northwestern, Science Happy Hour - <i>Invited</i>	2022
Stony Brook, Astronomy Seminar - <i>Invited</i>	2022
Astrochemical Discussions, Seminar - <i>Invited</i>	2021
University of Arizona , Origins Seminar - <i>Invited</i>	2021
University of California Berkeley , Lunch Talk - <i>Invited</i>	2021
University of Leicester , Planet and Disks Group Talk- <i>Invited</i>	2021
Five Years After HL Tau , Conference Talk- <i>Applied and Accepted</i>	2020
Astrochemical Frontiers , Conference Talk- <i>Applied and Accepted</i>	2020

– Honors and Awards –

Total Grant/Fellowship Money Accrued: \$281,500

Rackham Graduate School DEI Certificate Recipient	2022
Margaret Ayer Host Award, Rackham Graduate School - \$8,500 - <i>University of Michigan</i>	2022

“Recognizes Rackham students who have demonstrated exceptional scholarly achievement, a sense of social responsibility and service, and a lively interest in promoting the success of women in the academic community”

Astronomy DEI Champion Award Recipient - <i>University of Michigan, Astronomy Department</i>	2021, 2022
NASA FINESST Grant Recipient - <i>NASA</i>	2019
NSF Graduate Research Fellowship Program, Recipient - <i>National Science Foundation</i>	2019
NSF Graduate Research Fellowship Program, Honorable Mention - <i>National Science Foundation</i>	2018
Most Outstanding Senior - <i>College of Science, University of Arizona</i>	2018

- Telescope Time -

NOEMA - **30 hours** : A Robust Mass Determination of FU Ori Objects

NOEMA - **16 hours** : Constraining the Elusive Water Reservoir in a Planet-forming Disk

- Work and Teaching Experiences -

Planetarium Operator - University of Michigan Natural History Museum	2019-2023
Graduate Student Instructor Astronomy 102 - <i>University of Michigan</i>	Winter 2019
Teaching Assistant, Intro to Astronomy for Majors <i>University of Arizona</i>	Fall 2018
Instructional Developer <i>University of Arizona</i>	2015-2018

- Outreach and Service Experiences -

Astronomy Mentorship Program for Upcoming Postdocs (AMP-UP) Organizer	2024-present
Member of Committee for Sexual-Orientation & Gender Minorities in Astronomy (SGMA)	2023-present
Deputy Chair of Harvard & Smithsonian Center for Astrophysics Committee on Equity, Diversity, Inclusion, and Belonging	2023-present
NASA Panel Grand Chair	2024
Reviewer for the Astronomy & Astrophysics Journal	2023
Reviewer for the Nature Astronomy	2023
Reviewer for the Astrophysical Journal	2021-2024
NASA Panel Secretary	2023
Graduate Curriculum Full Committee Member- <i>University of Michigan Astronomy department</i>	2022
Graduate Admissions Full Committee Member- <i>University of Michigan Astronomy department</i>	2022
Astrobiters: astrobiters.org	
• Author	2019-2021
• Admin Co-chair	2020-2023
• Admin Committee	2019-2023
• Scheduling Committee Member and Chair	2019-2023
Anti-racism Book Club	2020 - 2023
Inter-gay-lactic: LGBTQ+ Support Group Member	2019 - 2023
Letters to a Pre-Scientist Letter Writer	2019 - 2023
FEMMES Group Leader- <i>University of Michigan</i>	2019 - 2022
National Science Communication Conference Attendee	2021
RELATE Science Communication Summer Workshop	2020
Astronomy Camp Counselor- <i>University of Arizona</i>	Summer 2019
Astronomy on Tap, Ann Arbor	2019-2020
Science Olympiad Coach - Solar System Event- <i>Slauson Middle School</i>	2019 - 2020
Futures Unlimited, Workshop Organizer- <i>Oakton Community College, Des Plaines IL</i>	Winter 2019