

EDUCATION

Harvard University	2023 – Present
– Ph.D., Astronomy and Astrophysics	
University of Virginia	2022
– B.S. Astronomy-Physics (with high distinction) & Statistics (concentration in Mathematical Statistics)	
– <i>Thesis</i> : Star Formation and Feedback in Low-metallicity Environments: From Molecular Clouds to Protostars	

EXPERIENCE

Research Assistant, Harvard-Smithsonian Center for Astrophysics	2023 –
<i>Advisor: Prof. Alyssa Goodman</i>	
Undergraduate Researcher, UVA	2019 – 2022
<i>Advisor: Prof. Rémy Indebetouw</i>	
NSF REU, Smithsonian Astrophysical Observatory	2022
<i>Advisor: Prof. Alyssa Goodman</i>	
Undergraduate Research Fellow, Chalmers Initiative on Cosmic Origins	2020 – 2021
<i>Advisors: Prof. Jonathan Tan & Dr. Giuliana Cosentino</i>	

AWARDS

NSF Graduate Research Fellowship	2023
Goldwater Scholarship	2022
Astronaut Scholarship	2022
Universities Space Research Association Distinguished Undergraduate Award	2022
D. Nelson Limber Award, UVA Dept. of Astronomy (<i>Outstanding 4th year undergraduate</i>)	2023
Vysotsky Prize, UVA Dept. of Astronomy (<i>Outstanding 3rd year undergraduate</i>)	2022
McCullough Scholarship, UVA Dept. of Astronomy (<i>Outstanding 2nd year undergraduate</i>)	2021
Echols Scholar, UVA	2018
College Science Scholar, UVA	2018

PUBLICATIONS

5. Hsu, C.; Tan, J. C.; Christie, D.; Cheng, Y.; O'Neill, T. J. *GMC Collisions As Triggers of Star Formation. VIII. The Core Mass Function.* 2023, MNRAS, 552, 700.
4. O'Neill, T. J.; Indebetouw, R.; Sandstrom, K. M.; Bolatto, A. D.; Jameson, K. E.; Carlson, L. R.; Finn, M. K.; Meixner, M.; Sabbi, E.; Sewilo, M. *Sequential Star Formation in the Young SMC Region NGC 602: Insights from ALMA.* 2022, ApJ, 938, 82.
3. O'Neill, T. J.; Indebetouw, R.; Bolatto, A. D.; Madden, S. C.; Wong, T. *Effects of CO-dark Gas on Measurements of Molecular Cloud Stability and the Size-Linewidth Relationship.* 2022, ApJ, 933, 179.
2. Swift, J. J.; and forty other authors including O'Neill, T. J. *The Renovated Thacher Observatory and First Science Results.* 2022, PASP, 134, 1033.
1. O'Neill, T. J.; Cosentino, G.; Tan, J. C.; Cheng, Y.; Liu, M. *The Core Mass Function across Galactic Environments. III. Massive Protoclusters.* 2021, ApJ, 916, 45.

Non-refereed:

3. O'Neill, T. J.; Goodman, A. A.; Soler, J. D.; Han, J. J.; Zucker, C. *Mapping the Local Bubble's Magnetic Field in 3D*. 2023, available on Authorea preprint server (DOI: 10.22541/au.167303779.92162611).
2. Rasmussen, K.; Chen, J.; Colquhoun, R. L.; Frentz, S.; Hiatt, L.; Kosciuszka, A. J.; Olsen, C.; O'Neill, T. J.; Zamloot, V.; Strauss, B. E. *Gender Inclusive Methods in Studies of STEM Practitioners*. 2023, arXiv:2307.15802.
1. Strauss, B. E.; Borges, S. R.; Faridani, T.; Grier, J. A.; Kihne, A.; Maier, E. R.; Olsen, C.; O'Neill, T.; Rivera-Valentín, E. G.; Sneed, E. L.; Waller, D.; Zamloot, V. *Nonbinary Systems: Looking Towards the Future of Gender Equity in Planetary Science*. 2020, State of the Profession White Paper for the Planetary Science and Astrobiology Decadal Survey 2023–2032.

PRESENTATIONS

Talks:

Surveying the Milky Way: the Universe in Our Own Backyard; Caltech IPAC. <i>The 3D Structure of Bubbles & Clouds in the Solar Neighborhood, identified with Persistent Homology</i>	2023
Harvard-Heidelberg Star Formation Workshop. <i>The 3D Structure of Bubbles & Clouds in the Solar Neighborhood, identified with Persistent Homology</i>	2023
Colloquium, UVA Physics Department. <i>Mapping the Local Bubble's Magnetic Field in 3D</i>	2023
Press Conference at 241 st Meeting of the AAS. <i>A 3D Map of the Local Bubble's Magnetic Field</i>	2023
241 st Meeting of the AAS. <i>A 3D Map of the Local Bubble's Magnetic Field</i>	2023
Max Planck Institute for Extraterrestrial Physics CAS Star & Planet Formation Journal Club. <i>Sequential Star Formation in the Young SMC Region NGC 602</i>	2022
UVA Sigma Pi Sigma Research Symposium. ("Best Talk") <i>Mapping the Local Bubble's Magnetic Field in 3D</i>	2022
Smithsonian Astrophysical Observatory REU Symposium. <i>Mapping the Local Bubble's Magnetic Field in 3D</i>	2022
Michigan State University Astro Coffee. <i>The Core Mass Function Across Galactic Environments</i>	2021
237 th Meeting of the AAS. <i>The Core Mass Function in Massive, Dense Protoclusters</i>	2021
VICO-CICO Fall Science Workshop. <i>The Core Mass Function in Massive Protoclusters</i>	2020
VICO-CICO Summer Symposium. <i>Searching for the Peak of the Core Mass Function with ALMA</i>	2020

Posters:

241 st Meeting of the AAS. (Costa et al.) <i>Complete Confusion: Photometry of Extended Sources in Interferometric Radio Data</i>	2023
52 nd Lunar and Planetary Science Conference. (Strauss et al.) <i>Nonbinary Systems: Gender-inclusive Study Methods in Planetary Science</i>	2021

American Geophysical Union Fall Meeting. (Strauss et al.)	2020
<i>Nonbinary Systems: Looking Toward the Future of Gender Equity in Planetary Science</i>	
232 nd meeting of the AAS. (Swift et al.)	2018
<i>Nearby Type Ia Supernova Follow-up at the Thacher Observatory</i>	
229 th meeting of the AAS.	2017
<i>First Light of the Renovated Thacher Observatory</i>	
229 th meeting of the AAS. (Swift et al.)	2017
<i>Does the Eclipsing Binary KIC 10935310 Contain a Massively Inflated M Dwarf?</i>	
229 th meeting of the AAS. (Edwards et al.)	2017
<i>A Search for Planet 9 at the Thacher Observatory</i>	
227 th meeting of the AAS.	2016
<i>The Renovation and Future Capabilities of the Thacher Observatory</i>	

OBSERVING TIME

PI: ALMA Cycle 9 “CO-dark gas in the Low-metallicity Star-forming region NGC 602.” 11 hrs
Co-I: ALMA Cycle 10 (PI: E. Koch). 179 hrs
Co-I: ALMA Cycle 10 (PI: S. Madden). 25 hrs
Co-I: LCO FLOYDS spectrograph (PI: J. Swift). 2 hrs

SERVICE & OUTREACH

Organizing Committee, Harvard-Heidelberg Star Formation Workshop	2023
Diversity, Equity, and Inclusion Committee, UVA Dept. of Astronomy	2021 – 2022
Graduate-Undergraduate Astronomy Committee, UVA Dept. of Astronomy	2020 – 2022
Undergraduate Peer Mentoring Program, UVA Dept. of Astronomy	2020 – 2022
UVA Astronomy Club (Vice President, Outreach Chair, Event Manager)	2020 – 2022
Astronomy Undergraduate Council (Chair), UVA Dept. of Astronomy	2020 – 2021

October 2023