

## EDUCATION

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University of Virginia	December 2022
– B.S. Astronomy-Physics (with high distinction) & Statistics	
– <i>Thesis</i> : Star Formation and Feedback in Low-metallicity Environments: From Molecular Clouds to Protostars	

## EXPERIENCE

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Research Assistant, Harvard-Smithsonian Center for Astrophysics	2023 –
<i>Advisor</i> : Prof. Alyssa Goodman	
Undergraduate Researcher, UVA	2019 – 2022
<i>Advisor</i> : Prof. Rémy Indebetouw	
NSF REU, Smithsonian Astrophysical Observatory	2022
<i>Advisor</i> : Prof. Alyssa Goodman	
Undergraduate Research Fellow, Chalmers Initiative on Cosmic Origins	2020 – 2021
<i>Advisors</i> : Prof. Jonathan Tan & Dr. Giuliana Cosentino	
Student Head of Observatory, Thacher Observatory	2015 – 2018
<i>Advisor</i> : Dr. Jonathan Swift	

## AWARDS

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Goldwater Scholarship	2022
Astronaut Scholarship	2022
Universities Space Research Association Distinguished Undergraduate Award	2022
Best Talk, UVA Sigma Pi Sigma Research Symposium	2022
Vyssotsky Prize, UVA Dept. of Astronomy ( <i>Outstanding 3<sup>rd</sup> year undergraduate</i> )	2022
McCullough Scholarship, UVA Dept. of Astronomy ( <i>Outstanding 2<sup>nd</sup> year undergraduate</i> )	2021
Echols Scholar, UVA	2018
College Science Scholar, UVA	2018

## PUBLICATIONS

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- 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).
  - 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, submitted to MNRAS (arXiv:2301.10657).
  - 5. 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.
  - 4. 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.
  - 3. Swift, J. J; and forty other authors including O'Neill, T. J. *The Renovated Thacher Observatory and First Science Results*. 2022, PASP, 134, 1033.

2. 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.
1. Strauss, B. E.; Borges, S. R.; Faridani, T.; Grier, J. A.; Kiihne, 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

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### Talks:

Press Conference at 241 <sup>st</sup> Meeting of the AAS. <i>A 3D Map of the Local Bubble's Magnetic Field</i>	2023
241 <sup>st</sup> 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. <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
Astronaut Scholarship Foundation Technical Conference. <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 <sup>th</sup> 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 <sup>st</sup> Meeting of the AAS. (Costa et al.) <i>Complete Confusion: Photometry of Extended Sources in Interferometric Radio Data</i>	2023
52 <sup>nd</sup> 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.) <i>Nonbinary Systems: Looking Toward the Future of Gender Equity in Planetary Science</i>	2020
232 <sup>nd</sup> meeting of the AAS. (Swift et al.) <i>Nearby Type Ia Supernova Follow-up at the Thacher Observatory</i>	2018
229 <sup>th</sup> meeting of the AAS. <i>First Light of the Renovated Thacher Observatory</i>	2017
229 <sup>th</sup> meeting of the AAS. (Swift et al.) <i>Does the Eclipsing Binary KIC 10935310 Contain a Massively Inflated M Dwarf?</i>	2017
229 <sup>th</sup> meeting of the AAS. (Edwards et al.) <i>A Search for Planet 9 at the Thacher Observatory</i>	2017

OBSERVING TIME

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PI: ALMA Cycle 9 “CO-dark gas in the Low-metallicity Star-forming region NGC 602.” 11 hrs

Co-I: Las Cumbres Observatory Education Program, FLOYDS spectrograph (PI: J. Swift). 2 hrs

100+ nights using 0.7m telescope at the Thacher Observatory, Ojai, CA

SERVICE & OUTREACH

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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	
<ul style="list-style-type: none"> <li>Vice President</li> </ul>	2022
<ul style="list-style-type: none"> <li>Outreach Chair &amp; Event Manager</li> </ul>	2020 – 2022
Astronomy Undergraduate Council (Chair), UVA Dept. of Astronomy	2020 – 2021

SKILLS

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Programming	Python, R, SAS, SQL
Applications	CASA, glue, DS9, MESA, CARTA

February 2023