THEO O'NEILL

EDUCATION

University of Virginia Expected December 2022

• B.S. Astronomy-Physics (with distinction) & Applied Statistics

EXPERIENCE

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

AWARDS

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 ($Outstanding 3^{rd} year undergraduate$)	2022
McCullough Scholarship, UVA Dept. of Astronomy ($Outstanding 2^{nd} year undergraduate$)	2021
Echols Scholar, UVA	2018
College Science Scholar, UVA	2018

Publications

- 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

Talks:	
Max Planck Institute for Extraterrestrial Physics CAS Star & Planet Formation Journal Club. Sequential Star Formation in the Young SMC Region NGC 602	2022
UVA Sigma Pi Sigma Research Symposium. Mapping the Local Bubble's Magnetic Field in 3D	2022
Smithsonian Astrophysical Observatory REU Symposium. Mapping the Local Bubble's Magnetic Field in 3D	2022
Astronaut Scholarship Foundation Technical Conference. Mapping the Local Bubble's Magnetic Field in 3D	2022
Thacher Observatory Panel Discussion. Thacher's Astronomy Program: Publication Landmark Panel	2022
Michigan State University Astro Coffee. The Core Mass Function Across Galactic Environments	2021
237 th Meeting of the AAS. The Core Mass Function in Massive, Dense Protoclusters	2021
VICO-CICO Fall Science Workshop. The Core Mass Function in Massive Protoclusters	2020
VICO-CICO Summer Symposium. Searching for the Peak of the Core Mass Function with ALMA	2020
Posters:	
52 nd Lunar and Planetary Science Conference. (Strauss et al.) Nonbinary Systems: Gender-inclusive Study Methods in Planetary Science	2021
American Geophysical Union Fall Meeting. (Strauss et al.) Nonbinary Systems: Looking Toward the Future of Gender Equity in Planetary Science	2020
232 nd meeting of the AAS; Denver, CO. Nearby Type Ia Supernova Follow-up at the Thacher Observatory	2018
229 th meeting of the AAS; Grapevine, TX. First Light of the Renovated Thacher Observatory	2017
229 th meeting of the AAS; Grapevine, TX. Does the Eclipsing Binary KIC 10935310 Contain a Massively Inflated M Dwarf?	2017
229 th meeting of the AAS; Grapevine, TX. A Search for Planet 9 at the Thacher Observatory	2017
227 th meeting of the AAS; Kissimmee, FL. The Renovation and Future Capabilities of the Thacher Observatory	2016
Observing Time	
PI: ALMA Cycle 9 "CO-dark gas in the Low-metallicity Star-forming region NGC 602." 12 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	
Diversity, Equity, and Inclusion Committee, UVA Dept. of Astronomy	2021 -
Craduate Undergraduate Astronomy Committee UVA Dept. of Astronomy	2020 -

Undergraduate Peer Mentoring Program (Founder), UVA Dept. of Astronomy		2020 -	
UVA Astronomy C	lub		
• Vice President	t	2022 -	
• Outreach Chair & Event Manager		2020 - 2022	
Astronomy Underg	raduate Council (Chair), UVA Dept. of Astronomy	2020 - 2021	
SKILLS			
Programming Applications	Python, R, SAS, SQL CASA, glue, DS9, MESA, CARTA		

November 2022