Evan Latham Sneed

he/him or they/them

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FDUCATION

DOCTORATE OF PHILOSOPHY IN EARTH AND PLANETARY SCIENCES

SEPTEMBER 2022 - PRESENT

University of California, Riverside

> Advisors: Edward W. Schwieterman & Timothy W. Lyons

BACHELOR OF SCIENCE IN ASTRONOMY AND ASTROPHYSICS

AUGUST 2016 - AUGUST 2020

Pennsylvania State University

Minors: Astrobiology, Mathematics, and Physics

> Certificate: Science Research Distinction

> Thesis: A Climatic Investigation of Ammonia as a Remote Biosignature on Cold Haber Worlds

> Advisor: James F. Kasting

RESEARCH & OBSERVING EXPERIENCE

GRADUATE RESEARCHER

SEPTEMBER 2022 - PRESENT

University of California, Riverside

> Advisors: Edward W. Schwieterman & Timothy W. Lyons

Researching the probability and detectability of Archean analogues throughout the habitable zone

GREEN BANK TELESCOPE OBSERVER

APRIL 2022 - PRESENT

University of California, Berkeley

> Advisor: Steve Croft

> 200+ hours as observer on-call

POSTBACCALAUREATE RESEARCHER

JANUARY 2021 – AUGUST 2022

Pennsylvania State University. University Park

> Advisor: Jason T. Wright

Searched for "spillover" radio signals originating from systems with known planet-planet occultations using N-body modeling

Undergraduate Researcher

SEPTEMBER 2017 - MAY 2020

Pennsylvania State University, University Park

> Advisor: James F. Kasting

> Researched the habitability of terrestrial planets with hydrogen-dominated atmospheres using a one-dimensional climate model

PLANETARY CHEMISTRY & ASTROBIOLOGY INTERN

JUNE - AUGUST 2018

NASA Jet Propulsion Laboratory

> Advisor: Yuk L. Yung

> Modeled atmospheric concentrations of sulfur isotopes using ice core data and a one-dimensional photochemical model

TEACHING EXPERIENCE

APPOINTMENTS

TEACHING ASSISTANT

SEPTEMBER 2023 - PRESENT

University of California, Riverside

> Astrobiology: The Search for Life in the Universe [GEO 080] (Stephen Kane & Charles Diamond)

SPRING 2024 FALL 2023

Oceanography [GEO 009] (Maryjo Brounce)

JUNE - JULY 2019

UPWARD BOUND INSTRUCTOR Pennsylvania State University, University Park

> Astronomy: The Search for Exoplanets, The Search for Life

TEACHING ASSISTANT

January - May 2017

Pennsylvania State University, Erie, The Behrend Campus

> General Physics: Mechanics [PHYS 211] (Michael A. Zarger)

GUEST LECTURES

- 2024 An Infinity of Worlds: Planets and the Search for Life in the Universe [Williams: ASTR 16] (Rob Wittenmyer)
- 2023 Oceanography [UC Riverside: GEO 009] (Maryjo Brounce)
 - Freshman Advising Seminar in the Natural and Agricultural Sciences [UC Riverside: NASC 093] (Stephen Kane)
- 2018 Planets and Planetary System Formation [Penn State: ASTRO 420W] (Eric Feigelson)

PUBLICATIONS

REFEREED JOURNAL ARTICLES

- 6. Barnes, R., et al. (in prep.).
- 5. **Sneed, E. L.**, *et al.* (in prep.).
- 4. Tusay, N., Sheikh, S. Z., **Sneed, E. L.**, Farah, W., Pollak, A. W., Siemion, A., Wright, J. T. (submitted).
- 3. Schwieterman, E. W., Fauchez, T. J., Haqq-Misra, J., Kopparapu, R. K., Angerhausen, D., Pidhorodetska, D., Leung, M., **Sneed, E. L.** (submitted).
- 2. Li, M. G., Sheikh, S. Z., Gilbertson, C., He, M. Y., Isaacson, H., Croft, S., **Sneed, E. L.** (2023). <u>Developing a Drift Rate Distribution for Technosignature Searches of Exoplanets.</u> *The Astronomical Journal*, vol. 166(5), pg. 182. doi:10.3847/1538-3881/acf83d.
- 1. Tusay, N., Huston, M.J., Dedrick, C.M., Kerby, S., III, M.L.P., Croft, S., Wright, J.T., Robertson, P., Sheikh, S., Duffy, L., Foote, G., Hyde, A., Lafond, J., Mullikin, E., Parts, W., Sandhaus, P., Smith, H.H., **Sneed, E.L.**, Czech, D., Gajjar, V. (2022). A Search for Radio Technosignatures at the Solar Gravitational Lens Targeting Alpha Centauri. *The Astronomical Journal*, vol. 164(3), pg. 116. doi:10.3847/1538-3881/ac8358.

REPORTS & WHITE PAPERS

- 6. Davenport, J. R. A., et al. (in prep.).
- 5. Kerins, E., Awiphan, S., Edmondson, K., Garrett, M., Heller, R., Huston, M., Kipping, D., Kopparapu, R., Haqq-Misra, J., Price D. C., Siemion, A., Sharma, S., **Sneed, E. L.**, Socas-Navarro, H., Wilson, R., Wright, J. (2023). RoSETZ: Roman Survey of the Earth Transit Zone A SETI-Optimized Survey for Habitable-Zone Exoplanets. *NASA Roman Core Community Survey*. arXiv:2306.10202.
- 4. Haqq-Misra, J., Ashtari, R., Benford, J., Carroll-Nellenback, J., Döbler, N.A., Farah, W., Fauchez, T.J., Gajjar, V., Grinspoon, D., Huggahalli, A., Kopparapu, R.K., Lazio, J., Profitiliotis, G., **Sneed, E.L.**, Varghese, S.S., Vidal, C. (2022). Opportunities for Technosignature Science in the Planetary Science and Astrobiology Decadal Survey. *The First Penn State SETI Symposium*. arXiv: 2209.11685.
- 3. Strauss, B.E., Borges, S.R., Faridani, T., Grier, J.A., Kiihne, A., Maier, E.R., Olsen, C., O'Neill, T., Rivera-Valentin, E.G., **Sneed, E.L.**, Waller, D., Zamloot, V. (2020). Nonbinary Systems: Looking Towards the Future of Gender Equity in Planetary Science. *Planetary Science and Astrobiology Decadal Survey* 2023–2032. doi:10.3847/25c2cfeb. 3dda24c5.
- 2. Sheikh, S.Z., Berea, A., Davis, R., de la Torre, G.G., DeMarines, J., Fisher, T., Foote, S., Gelino, D., Grinspoon, D., Profitiliotis, G., Sessa, A.M., Singam, C., **Sneed, E.L.**, Vidal, C., Wright, J.T. (2020). <u>Technosignatures as a Priority in Planetary Science</u>. *Planetary Science and Astrobiology Decadal Survey* 2023–2032. doi:10.3847/25c2cfeb. 93bdfe43.
- 1. Kopparapu, R., Arney, G., Domagal-Goldman, S., Schwieterman, E., Hartnett, H.E., Kiang, N.Y., **Sneed, E.L.**, Reinhard, C.T., Dong, C., Hébrard, E., Anbar, A., Santos, N.C., Turner, N. (2020). <u>Strange New Worlds: Comparative Planetology of Exoplanets and the Solar System</u>. *Planetary Science and Astrobiology Decadal Survey 2023–2032*. doi:10.3847/25c2cfeb.479f6cc8.

Presentations & Conferences

CONTRIBUTED TALKS

2024	Archean Analogue Photochemistry Across the Habitable Zone, Astrobiology Science Conference 2024, <i>Providence, Rhode Island</i>		
2023	A Continued Search for Technosignatures During Planet-Planet Occulations, The Second Penn State SET Symposium, <i>University Park</i> , <i>Pennsylvania</i>		
	An Archival Search for Technosignatures During Planet-Planet Occultations, Astrobiology Graduate Conference 2023, <i>La Jolla, California</i>		
	An Archival Search for Technosignatures During Planet-Planet Occultations, 241st Meeting of the American Astronomical Society, <i>Seattle, Washington</i>		
2022	An Archival Search for Technosignatures During Planet-Planet Occultations, The First Penn State SETI Symposium, <i>University Park</i> , <i>Pennsylvania</i>		
	An Archival Search for Technosignatures During Planet-Planet Occultations, Astrobiology Science Conference 2022, <i>Atlanta, Georgia</i>		
2021	Exoplanet Occultations as Technosignature Targets, The 2021 Assembly of the Order of the Octopus, <i>Virtual</i>		
2020	Eavesdropping During Planet-Planet Occulations, PSETI Center Journal Club and Seminar, Virtual		
	Posters		
2023	Archean Analogue Photochemistry Across the Habitable Zone, Exoplanets in Southern California 2023, Pasadena, California		
	Archean Analogue Photochemistry Across the Habitable Zone, 2023 Sagan Exoplanet Summer Workshop, Pasadena, California		
2020	A Climatic Investigation of Ammonia as a Remote Biosignature III, Exoplanets III, Virtual		
	A Climatic Investigation of Ammonia as a Remote Biosignature II, 2020 Penn State Undergraduate Exhibition, <i>Virtual</i>		
2019	A Climatic Investigation of Ammonia as a Remote Biosignature, 9 th Annual oSTEM Conference, <i>Detroit, Michigan</i>		
	ATTENDED		
2024	National Science Policy Symposium 2024, <i>Riverside, California</i>		
2023	The Third VPLanet Developer's Workshop, <i>Virtual</i>		
	Astrobiology 2023: Oxygen in Planetary Biospheres, Green Bank, West Virginia		
	Allen Telescope Array Observing School, <i>Hat Creek, California</i>		
	SETI with LSST Workshop, Seattle, Washington		
2021	The First VPLanet Developer's Workshop, <i>Virtual</i>		
	Winter 2021 Green Bank Telescope Remote Observer Training Workshop, Virtual		
2020	2020 Sagan Exoplanet Summer Workshop, <i>Virtual</i>		
2019	Inclusive Astronomy 2, <i>Baltimore, Maryland</i>		
2018	8 th Annual oSTEM Conference, <i>Houston, Texas</i>		
	42 nd COSPAR Scientific Assembly, <i>Pasadena</i> , <i>California</i>		
2017	7 th Annual oSTEM Conference, <i>Chicago, Illinois</i>		

Awards & Honors

2023	2023 AAS FAMOUS (Funds for Astronomical Meetings: Outreach to Underrepresented Scientists) Travel Grant			
2022	University of California, Riverside Chancellor's Distinguished Fellowship			
2020	2020 Norman Freed Undergraduate Research Award			
	John Sr. and Kimlyn Patishnock Undergraduate Research Award			
2019	Out in STEM Leadership Development Program Graduate			
	Out in STEM Leadership Persistence Award			
2018	Penn State Behrend Honors Program Graduate			
	ACADEMIC SERVICE			
2024	Scientific Organizing Committee [Co-Chair]: The 2024 Assembly of the Order of	f the Octopus		
2023	2023 Executive Secretary: NASA Planetary Science Division Review Panel			
2022	2022 Local Organizing Committee: The First Penn State SETI Symposium			
2021	Organizing Committee: The 2021 Assembly of the Order of the Octopus			
2020	Global Organizing Committee: Exoplanets III			
	Equal Opportunity Planning Committee: Penn State Astronomy Department			
	COMMUNITY SERVICE & OUTREACH			
> C	SCIENCE OUTREACH > Camp Instructor: Camp Highlander JULY 2023 - PRESENT			
> C	July 2023 - Present January 2023 - Present			
	➤ Volunteer: Penn State Department of Astronomy AUGUST 2017 – AUGUST 20			
	 Contributed Talk for AstroFest: How to Make a (Habitable) Planet Contributed Talk for AstroFest: Fly Me to (Saturn's) Moon 	AUGUST 2020 JULY & OCTOBER 2019		
> In	➤ Invited Speaker: Astronomy on Tap State College September 2020			
> Po	➤ Podcast Guest: "Assigned Scientist at Bachelor's" September 2020			
> Vo	olunteer: Penn State Center for Sexual & Gender Diversity	AUGUST 2017 – MAY 2020		
> M	Mentor: Nate Anderson (High School Student, now UMich Engineering Undergrad) JULY 2019 – MARCH 202			
	➤ Judge: Mars 2020 Name The Rover Contest NOVEMBER 2019 – MARCH 2020			
	➤ Volunteer: Science U "Life in Space!" Day Camp July 2019			
> Vo	olunteer: Penn State Behrend School of Science	AUGUST 2016 – AUGUST 2017		
	Organizational Involvement & Leadership			
> Q	ueer Graduate Student Association Vice President	NOVEMBER 2022 - PRESENT OCTOBER 2023 – PRESENT		
> Se	ciComm @ UCR Secretary	OCTOBER 2022 - PRESENT OCTOBER 2023 - PRESENT		
> To	owards a More Inclusive Astronomy (TaMIA)	January 2019 – August 2021		
> 0	ut in STEM (oSTEM) at Penn State	FEBRUARY 2019 – MAY 2020		
	> President> Secretary	FEBRUARY 2019 – MAY 2020 MARCH 2018 – FEBRUARY 2019		
	> Webmaster	SEPTEMBER 2017 – MARCH 2018		

- > Penn State Astronomy Club
 - > Treasurer
 - > Webmaster

APRIL 2019 – MAY 2020 APRIL 2019 – MAY 2020 SEPTEMBER 2018 – APRIL 2019

AFFILIATIONS & MEMBERSHIP

- ➤ Alternative Earths Astrobiology Center (AEAC)
- ➤ American Astronomical Society (AAS) [Graduate Student Member]
 - > Division on Dynamical Astronomy (DDA)
 - > Division for Planetary Sciences (DPS)
- > Committee on Space Research (COSPAR) [Associate Member]
- > International Society of Nonbinary Scientists (ISNBS)
- ➤ National Science Policy Network (NSPN) [Early Career Member]
- ➤ Nexus for Exoplanet System Science (NExSS) [Affiliate Member]
- > Out in Science, Technology, Engineering, and Mathematics, Incorporated (oSTEM)
- > Penn State Extraterrestrial Intelligence Center (PSETI) [Affiliate Member]
- > Scientific Society for Astrobiology (SSA) [Student Member]
- > University of California, Berkeley SETI Research Center (BSRC)