Calder Lenhart

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Education

2020–2024 **B.S. Physics, Astronomy & Astrophysics**; Ohio State University

Minor in Mathematics, Minor in History

Magna cum laude, with Research Distinction in Astronomy & Astrophysics

Thesis: Phase-Resolved Cross-Correlation Transmission Spectroscopy of KELT-20b

Research Experience

2025-	ASAS-SN Data Analyst, Department of Astronomy, Ohio State University, (Advisors:
	Chris Kochanek, Krzysztof Stanek)
2023-2025	Exoplanet Researcher, Department of Astronomy, Ohio State University, (Advisor:
	Dr. Marshall C. Johnson, Co-advisor: Prof. Ji Wang)
2022-2023	Undergraduate Research Assistant, Department of Materials Science and Engineer-
	ing, Ohio State University, (Advisor: Prof. Sheikh Akbar)

Awards & Honors

2024	Ann Slusher Tuttle Undergraduate Scholarship, Ohio State University Department
	of Astronomy
2023	Undergraduate Research Scholarship, Ohio State University College of Arts and
	Sciences
2023	1st Place, MakeOHI/O 2023
2020	Eagle Scout, Boy Scouts of America
2019	Youngstown CityScape Beautification Watch Award

Publications

Google Scholar ORCID

Journal Articles

W1. Basinger, C., Johnson, M. C., Wang, J., Duck, A., Pai Asnodkar, A., Petz, S., **Lenhart, C.**, Ilyin, I. & Strassmeier, K. *PEPSI Investigation, Retrieval, and Atlas of Numerous Giant Atmospheres (PIRANGA). III. Composition and winds in the atmosphere of TOI-1518 b* Mar. 2025. arXiv: 2503.07723 [astro-ph.EP].

W2. Lenhart, C., Johnson, M. C., Wang, J., Pai Asnodkar, A., Petz, S., Duck, A., Strassmeier, K. G. & Ilyin, I. *PEPSI Investigation, Retrieval, and Atlas of Numerous Giant Atmospheres (PI-RANGA). II. Phase-Resolved Cross-Correlation Transmission Spectroscopy of KELT-20b Mar.* 2025. arXiv: 2503.07719 [astro-ph.EP].

Conference Proceedings

C1. Lenhart, C., Johnson, M., Petz, S., Wang, J., Pai Asnodkar, A., Strassmeier, K. & Ilyin, I. Analysis of KELT-20b's Atmospheric Dynamics Using PEPSI: Line Profiles During Transit and Velocity Offsets in American Astronomical Society Meeting Abstracts 243 (Feb. 2024), 179.09.

Presentations

Talks

T1. **Lenhart, C.** & Johnson, M. *Analysis of an Ultra-Hot Jupiter's Atmosphere* Ohio State Department of Astronomy Summer Undergraduate Research Program Symposium (Columbus, OH, USA). July 2023.

Posters

P1. **Lenhart, C.**, Johnson, M. C., Wang, J., Asnodkar, A. P., Petz, S., Strassmeier, K. G. & Ilyin, I. *Analysis of KELT-20b's Transmission Spectrum: Atmospheric Dynamics of Atomic Species*243rd Meeting of the American Astronomical Society (New Orleans, LA, USA). Jan. 2024.
https://aas243-aas.ipostersessions.com/Default.aspx?s=89-34-93-49-20-C4-FB-46-1F-28-CD-79-11-D0-C0-38.

Work Experience

2025-	Physics Al Trainer, Mercor Intelligence, Remote (Independent Contractor)
2023	Astrophysics Researcher, Ohio State Department of Astronomy Summer Undergrad-
	uate Research Program in Astrophysics, Columbus, OH
2022-2023	Private Tutor, Grade Potential Tutoring, Columbus, OH (Independent Contractor)
2022-2023	Private Tutor, Wyzant, Remote (Independent Contractor)
2021-2022	Math Tutor, Ohio State University Mathematics and Statistics Learning Center,
	Columbus, OH

Projects

2023	Machine Learning: Linking Writing Processes to Writing Quality, GitHub
2023	Make OHI/O Makeathon (Intel Challenge), Submission
2021-2022	Buckeye Solar Racing, Aerodynamics Subteam
2021	NASA L'SPACE Mission Concept Academy, Astrophysics Team & Engineering Team