

Cecilia Steel

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in <https://linkedin.com/in/ceciliazsteel/> 🌐 <https://ceciliazsteel.github.io/>

Education

University of California - Davis

- Physics Ph.D Student

Davis, CA
Sep 2024 – Present

University of Pittsburgh

- BS in Physics and Astronomy, *with Honors, magna cum laude*
- Minor in Mathematics

Pittsburgh, PA
Aug 2020 – April 2024

Research

Stellar Dynamics and Radial Migration in Milky Way–Mass Galaxies from Cosmological Simulations

UC Davis
June 2025 – Present

Advisor - Dr. Andrew Wetzel

- Investigate stellar dynamics in Milky Way–mass galaxy disks using FIRE cosmological zoom-in simulations, with emphasis on quantifying the nature of radial redistribution and the migration and evolution of stellar orbits over time.

Modeling Star Formation Histories of Galaxies at Half the Age of the Universe

University of Pittsburgh
May 2022 – Aug 2024

Advisor - Dr. Rachel Bezanson

- Measured empirically motivated star-formation history predictions of massive galaxies from the UniverseMachine model and compared to previously measured star formation histories derived directly from observations.

Survey of Transitioning Extrasolar Planets of the University of Pittsburgh (STEPUP) Member

University of Pittsburgh
May 2022 – Aug 2024

- Member of an undergraduate research team that uses the Keeler Telescope at the Allegheny Observatory. We observe and detect exoplanets, collect and process data on their transits, and generate light curves.

Publications

A Comparison of Star-Formation Histories Derived from UniverseMachine and LEGA-C at $0.6 < z < 1$

Jan 2024

Cecilia Steel, Alan Pearl, Yashsa Kaushal, Rachel Bezanson

[Steel et al. 2024](#) [🔗](#)

A Few Percent of $z \sim 0.8$ Massive Star-Forming Galaxies Captured at Rejuvenation

Yashsa Kaushal, Rachel Bezanson, Junyu Zhang, *Cecilia Steel*, ...

[Kaushal in prep](#) [🔗](#)

Awards and Honors

NASA Pennsylvania Space Grant Consortium Research Scholarship

University of Pittsburgh
Summer 2022, Spring 2023, Summer 2023, Fall 2023

Julia Thompson Award For Excellence in Undergraduate Writing

University of Pittsburgh
2024

Sigma Pi Sigma, the National Physics Honor Society Membership

2024

Teaching Assistant Appointments

PHY 157 - Astronomy Instrumentation & Data Analysis Laboratory

Instructor: Tucker Jones

*UC Davis
Spring 2025*

PHY 7A - General Physics

Instructor: Dina Zhabinskaya & Thomas Weideman

*UC Davis
Winter 2025*

PHY 7B - General Physics

Instructor: Sergey Savrasov

*UC Davis
Fall 2024*

Undergraduate Poster Sessions

Conferences for Undergraduate Women in Physics (CUWIP)

*United States Military
Academy West Point
January 2024*

Testing the Star-Formation Histories of Massive Galaxies in the UniverseMachine Model at $z \sim 0.8$ with the LEGA-C Survey [↗](#)

AAS 243rd Meeting

*New Orleans Ernest N.
Morial Convention Center
January 2024*

Testing the Star-Formation Histories of Massive Galaxies in the UniverseMachine Model at $z \sim 0.8$ with the LEGA-C Survey [↗](#)

University of Pittsburgh Undergraduate Poster Session

*University of Pittsburgh
November 2023*

Testing the Star-Formation Histories of Massive Galaxies in the UniverseMachine Model at $z \sim 0.8$ with the LEGA-C Survey [↗](#)

Conferences for Undergraduate Women in Physics (CUWIP)

*University of Pittsburgh
January 2023*

(Testing a Theoretical Model (“UniverseMachine”) for Galaxy Star Formation Histories Derived from the LEGA-C Survey) [↗](#)