Claire Finley

Curriculum Vitae

Education

Ph.D. Astronomy, The University of Texas at Austin

August 2023 – Present

Advisor: Dr. Brendan P. Bowler

B.S. Astronomy and Astrophysics, Villanova University

August 2019 – May 2023

Minors in Physics and Art History

Appointments

The University of Texas at Austin

August 2023 – Present

Graduate Research Assistant

June 2022 – August 2022

NASA Goddard Space Flight Center OSTEM Summer Intern

Greenbelt, MD

Austin, TX

Green Bank Observatory & National Radio Astronomy Observatory

June 2021 – August 2021 Green Bank, WV

Research Experience for Undergraduates (REU)

January 2021 – May 2023

Villanova University
Teaching Assistant
Undergraduate Research Assistant

January 2020 - May 2021 August 2019 - March 2020

Public Observatory Attendant

Villanova, PA

Adler Planetarium Citizen Science and Space Visualization Intern June 2018 – August 2018 Chicago, IL

Research Interests

- o Formation and evolution of giant planets using direct imaging
- Planetary accretion processes and circumplanetary disk properties

Awards and Honors

Jason A. Cardelli Memorial Award for Undergraduate Research	April 2023
Sigma Pi Sigma Physics Honor Society	February 2023
John Mather Nobel Scholarship	July 2022
Certificate of Achievement in Ethical Leadership	November 2020

Contributed Publications

1. Modeling the "Dark-matter Dominated" Dwarf Galaxy Segue 1 with a Supermassive Black Hole Nathaniel Lujan, Karl Gebhardt, Richard Anantua, Owen Chase, Maya H. Debski, Claire Finley et al. 2025 ApJL 992 L25

Scientific Presentations

Contributed talks

51 Pegasi b: Cool Giant Planets and Their Systems

Division for Planetary Sciences Meeting #54

October 2025

Observatoire de Haute Provence, France

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October 2023

London, Ontario

Contributed posters

2025 Sagan Summer Workshop Silver Jubilee: Exoplanet Demographics

July 2025

Pasadena, California

Observing Proposals

As Co-Investigator

HST Cycle 33 GO 18139, PI Jiang: "Tracing Accretion in the Planetary Regime: A Comprehensive UV/Optical Survey of the Late Stages of Planet Formation", 60 orbits awarded

JWST Cycle~4 GO~7538, PI Cugno: "Giants in the making: the composition of circumplanetary disks with JWST MIRI-MRS", 59.2 hours awarded

 $\it JWST$ $\it Cycle~4$ GO 9091, PI Morgan: "Imaging a Hidden Super-Jupiter Accelerating its Metal-rich M-dwarf Host", 16.1 hours awarded

Leadership and Mentorship

The University of Texas at Austin	August 2023 – Present
Graduate mentor: Graduate-Undergraduate Mentorship in astronoMY program	
Villanova University	
President: Villanova Astronomical Society	April 2022 - May 2023
Treasurer: Villanova Astronomical Society	April 2021 - April 2022
Student mentor: Astrophysics Mentorship Program	August 2020 - May 2023

Outreach

Astronomy on Tap ATX

September 2024 - Present

Host and member of leadership team

Computational Proficiency and Instrument Experience

Languages: Python, IDL, S-Lang, SigmaPlot, Swift

Observing experience: NIRSPEC and OSIRIS at W.M. Keck Observatory; NASA IRTF iSHELL on Maunakea; 30-inch telescope at McDonald Observatory

Data analysis proficiency: Hubble Space Telescope Wide Field Camera 3, James Webb Space Telescope Mid-Infrared Instrument