

# Jaelyn S. Roth

Nashville, TN — jaelyn.roth@vanderbilt.edu — jaelynroth@gmail.com

## EDUCATION

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**Vanderbilt University**, Nashville, TN  
Ph.D., Astrophysics

August 2023 — Expected: May 2028

**Denison University**, Granville, OH  
B.S., Physics, *Summa Cum Laude*

August 2019 — May 2023

Thesis: Investigating Methods for Improving Image Deconvolution of Extragalactic Radio Jets

Advisor: Daniel C. Homan, Ph.D.

## RESEARCH

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- [1] D. C. Homan, J. S. Roth, and A. B. Pushkarev. Residual entropy as a diagnostic and stopping metric for clean. *The Astronomical Journal*, 167(1):11, dec 2023.
- [2] Jaelyn Roth and Daniel Homan. Entropy as a Stopping Metric for Deconvolving VLBI Images of AGN Jets. In *American Astronomical Society Meeting Abstracts*, volume 55 of *American Astronomical Society Meeting Abstracts*, page 301.41, January 2023.

## TEACHING & OUTREACH

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**Vanderbilt University, Dept. of Physics & Astronomy**  
*ASTR1010-L Teaching Assistant*

Nashville, TN  
Fall 2023

**EXPLO School, Pre-College Program**  
*Soft Robotics Elective Instructor*  
*Residential Advisor*  
*STEM Courses Teaching Assistant*

Wellesley, MA  
Summer 2023

**Denison University, Dept. of Physics & Astronomy**  
*PHYS126 Course Assistant*  
*PHYS125 Course Assistant*  
*Department Tutor*

Granville, OH  
Spring 2023  
Fall 2022  
Fall 2021

**Denison University, Society of Physics Students**  
*Elementary School Outreach Volunteer*  
*Co-President*

Granville, OH  
Fall 2020-Spring 2023  
Fall 2021

**Denison University, Academic Resource Center**  
*Tutor for PHYS 121, 122, 125, 126*  
*Tutor for MATH 130, 135, 145*

Granville, OH  
Spring 2021-Spring 2022  
Spring 2021-Spring 2022

## AWARDS & HONORS

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- Vanderbilt Provost's Graduate Fellow, Russell G. Hamilton Scholar August 2023
- Phi Beta Kappa Honor Society May 2023
- Denison University President's Medalist May 2023
- Mike Mickelson Research Award May 2023
- Ron Winters Award in Physics May 2023
- Chambliss Astronomy Achievement Student Award March 2023
- Sigma Xi Research Honor Society March 2023
- Society of Physics Students Leadership Scholarship May 2022
- Anderson Scholarship for Excellence in Science April 2021
- Sigma Pi Sigma Physics Honor Society April 2021
- Introductory Physics Book Award April 2020