Daniel A. Paradiso

CONTACT Information Department of Physics Syracuse University

Syracuse, NY 13244 USA

EDUCATION

Syracuse University, Syracuse, New York USA

Physics PhD Program

Attended: 2022 - PresentAdvisor: Eric Coughlin

Syracuse University, Syracuse, New York USA

B.S. with Distinction, Physics, Magna Cum Laude, 2022

RESEARCH INTERESTS

- Shocks
- Supernovae
- Tidal Disruption Events

Publications

Low-energy explosions in a gravitational field: Implications for sub-energetic supernovae and fast X-ray transients

E-mail: dparadis@syr.edu

Paradiso, D.A., Coughlin, E.R., Zrake, J., & Pasham, D.R., ApJ, Under Review

The Peak of the Fallback Rate from Tidal Disruption Events: Dependence on Stellar Type

Bandopadhyay, A., Fancher, J., Athian, A., Indelicato, V., Kapalanga, S., Kumah, A., **Paradiso, D.A.**, Todd, M., Coughlin, E.R., & Nixon, C.J., ApJL, *In Press*

Presentations

Syracuse University College of Arts and Sciences Research Festival, April 22, 2022

Title: Prototyping and Data Collection with the SciMAD Cosmic Ray Detector (Oral)

Syracuse University College of Arts and Sciences Research Festival, April 30, 2021

Title: Constructing and Testing a Helical Resonator (Oral)

RESEARCH EXPERIENCE Graduate Research Assistant, Syracuse University

Advisor: Eric Coughlin August 2022 - Present

• Using analytical and computational methods to understand high energy astrophysical phenomena such as supernovae and tidally disrupted stars

Undergraduate Student Researcher, Syracuse University

Advisor: Denver Whittington June 2021 - May 2022

• Designed and programmed an array of cosmic ray detectors to detect and calculate the trajectories of muons

TEACHING AND OUTREACH

Teaching Assistant, Syracuse University

2022 - 2023

• PHY 212: Electricity and Magnetism, recitation

Syracuse University Research in Physics Summer Program Mentor, Syracuse University

2022 - Present

Physics Outreach Group, Syracuse University

2021 - Present

Holden Observatory Tour Guide, Syracuse University

August 2021 - Present

Physics Undergraduate Learning Assistant, Syracuse University

January 2021 - May 2022

- PHY 102: Major Concepts of Physics II
- PHY 212: Electricity and Magnetism

Museum of Science & Technology Kids Day, Syracuse, NY

February 22, 2020

AWARDS

Social Justice and Community Building Award, Syracuse University Department of Physics 2022

Academic Excellence Prize, Syracuse University Department of Physics

2022

Positions

Physics Graduate Student Organization President, Syracuse University Department of Physics 2023-Present

Society of Physics Students Vice President, Syracuse University Department of Physics 2021-2022