

EDUCATION

Rochester Institute of Technology (RIT)

Ph.D. Candidate, Astrophysical Sciences and Technology Expected 2026

M.S. Astrophysical Sciences and Technology 2022

Northern Arizona University (NAU)

B.S. Physics and Astronomy 2018

- Study Abroad: Orvieto, Italy 2015

RESEARCH

RIT Lab for Multiwavelength Astrophysics (LAMA), Rochester, NY 2020 – Present

Runaway Monsters: A Search for Recoiling Supermassive Black Holes

- Utilizing machine learning techniques to identify supermassive black hole recoil candidates in the Sloan Digital Sky Survey Data Release 16 Quasar Catalog
- Advisor: Dr. Andrew Robinson

Fermi National Accelerator Laboratory (Fermilab), Batavia, IL 2023

Investigating the Effects of Garolite in ArgonCube

- Discovery of a non-reducible background radiation source for the Deep Underground Neutrino Experiment prototype, ArgonCube
- Advisor: Dr. Louise Suter

RIT LAMA, Rochester, NY 2020 – 2022

Unveiling Buried AGN in OH Megamaser Galaxies (OHMGs)

- Determined the dominant source of dust and gas heating and its relation to OH maser emission for a subsample of OHMGs
- The dominant source of heating does not agree with the optical classification in most of the systems, suggesting buried AGN in 7/9 OHMGs studied
- Advisor: Dr. Andrew Robinson

NAU Planetary Exploration Lab, Flagstaff, AZ 2018

Alteration Mineralogy Observed in Terra Cimmeria, Mars

- Performed a spectral analysis on CRISM data to observe peculiar signatures of minerals
- Advisor: Dr. Mark Salvatore

University of Arizona Eller College of Management, Tucson, AZ 2016

STEMulating Equality

- Created a non-profit proposal that aims to increase the number of female minorities pursuing a STEM degree
- Advisor: Dr. Matt Mars

PRESENTATIONS AND POSTERS

ASNY 2023 Fall Meeting, Siena College, NY 2023

Accepted Talk: *Runaway Monsters – A Search for Recoiling Supermassive Black Holes*

RIT AST Research Jamboree, Rochester, NY 2023

Presentation: *Runaway Monsters – A Search for Recoiling Supermassive Black Holes*

- Award: Best Senior Student Presentation

GEM Annual Board Meeting and Conference, Philadelphia, PA 2023

Poster: *Investigating the Effects of Garolite in ArgonCube* 2023
Fermilab, Batavia, IL
 Poster: *Investigating the Effects of Garolite in ArgonCube*
RIT AST Research Jamboree 2021, 2022
 Presentation: *Hunting for Monsters, OHMG!*

EMPLOYEMENT

Strasenburgh Planetarium, Rochester, NY 2022 – Present
Planetarium Show Presenter
 • Develop planetarium content and deliver live astronomical presentations for 100+ daily guests using Digistar 7 Software
RIT School of Physics and Astronomy (SOPA), Rochester, NY 2023
Adjunct Professor
 • Developed and implemented curriculum for 55 students in PHYS106: Solar System Astronomy in the form of lectures, science demonstrations, homework, and exams
Wegmans Food Markets, Penfield, NY 2021 – 2022
Bakery Customer Service
 • Produced a range of baked goods while delivering exceptional customer service
Sephora, Henrietta, NY 2019 – 2021
Beauty Advisor
 • Exceeded sales targets by delivering personalized beauty consultations
RIT Center for Detectors, Rochester, NY 2019
Graduate Research Assistant
 • Designing a cryostat for a far-infrared Fourier Transform Spectrometer using SOLIDWORKS
Lowell Observatory, Flagstaff, AZ 2017 – 2019
Public Program Educator
 • Led tours, developed and delivered engaging presentations on astronomy-related topics, and operated telescopes, such as the 24-in Clark Refractor for 250+ daily guests

MENTORING

RIT SOPA, Rochester, NY 2024
REU Mentor, Student: Kristina Mannix
 • Project: Constraining the Spectral Properties of Recoiling Supermassive Black Holes
RIT SOPA, Rochester, NY 2022
REU Mentor, Student: Ricardo Encarnacion
 • Project: Finding the Most Massive Black Holes
RIT SOPA, Rochester, NY 2019 – 2020
Teaching Assistant
 • Vibrations and Waves, Classical Mechanics
Dorrance Scholarship Program, Flagstaff, AZ 2019
Summer Bridge Peer Mentor
NAU, Flagstaff, AZ 2016 – 2017
Teaching Assistant

- Introduction to Astronomy, Life in the Universe

OUTREACH, VOLUNTEER, AND DEI

A Glowing Halo: The Quest for Truth in the Heavens , Rochester, NY	2024
<i>Expert Panelist - Q&A</i>	
AfterIT , Rochester, NY	2024
<i>Panelist: How to Succeed in Graduate School</i>	
GEM GRADLab , Rochester, NY	2023
<i>Panelist: Why and how to go to Graduate School</i>	
Conferences for Undergraduate Women in Physics , Ithaca, NY	2022
<i>Booth Exhibitor: Astrophysical Sciences and Technology Graduate Program</i>	
ImagineRIT , Rochester, NY	2022
FIRST Robotics , Flagstaff, AZ	2016 – 2019
Habitat for Humanity , Veles, Macedonia	2015

AWARDS AND HONORS

GEM Fellow , <i>The National GEM Consortium</i> , \$20,000	2023
Catalyst Fellowship , <i>NASA NY Space Grant Consortium</i> , \$15,000	2022
Space Grant , <i>NASA NY Space Grant Consortium</i> , \$3,500	2020
Dorrance Scholarship , <i>Dorrance Scholarship Program</i> , \$100,000	2014

TECHNICAL SKILLS

Computer Languages: *Python, MATLAB, LaTeX*
Spoken Languages: *Native Bilingual – Spanish and English*
Software: *Fusion 360*
Developer Tools: *GitHub, Unix, Linux*