## Jenna Samuel

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#### Education

University of California, Davis

September 2015 - Present

Davis, CA

Ph.D. in Physics

Advisor: Andrew Wetzel

McNair Graduate Fellow 2015 - 2016

Florida International University

January 2011 - May 2015

Miami, FL B.S. in Physics

McNair Scholar 2014 - 2015

#### Research

### Graduate Research

January 2018 - Present

University of California, Davis Advisor: Andrew Wetzel

- Exploring orbital histories of satellite galaxies around isolated Milky Way and Local Group-like pairs with the Latte and ELVIS simulations as part of the FIRE suite.
- Using Python to quantify spatial and kinematic coherence of satellites over time, and compare to the Milky Way's observed satellite plane.

Graduate Research

June 2016 - November 2017

University of California, Davis Advisor: Stefano Valenti

- Reduced spectroscopic and photometric data for reverberation mapping of active galactic nuclei (AGN).
- Developed a Monte Carlo interpolated cross-correlation routine in Python to measure time lags in AGN.

Undergraduate Research

August 2014 - September 2015

Florida International University

Advisor: Lei Guo

- Analyzed particle resonances produced by a photon beam incident on a liquid Helium target at Jefferson Lab.
- Calculated the photoproduction cross section of vector mesons using C++ and ROOT.

 $Science\ Undergraduate\ Laboratory\ Internship$ 

May - August 2014

Thomas Jefferson National Accelerator Facility

Advisors: Valery Kubarovsky, Joerg Reinhold

- Completed a ten week, residential internship program funded by the U.S. Department of Energy.
- Characterized detector properties of multi-anode photomultipliers for a Cherenkov radiation detector used in hadron spectroscopy.

# Teaching

Teaching Assistant

September 2016 - March 2018

University of California, Davis

- Lab TA for introductory physics lab sections.
- Course TA for introductory astronomy classes and upper division math methods for physics majors.
- Held weekly office hours, graded weekly assignments and exams, and organized quarterly review sessions.
- Received average teaching evaluation of 4 out of 5.

Learning Assistant

August 2012 - April 2015

Florida International University

- Facilitated experiments in introductory and modern physics labs using high voltage, radiation sources, and optical equipment.
- Taught students necessary Python programming skills for physics research, and led weekly office hours.

## Observing

Lick AGN Monitoring Project

March 2017

1 night, optical spectroscopy on Shane 3m telescope, Lick Observatory

UCO Graduate Observational Astronomy Workshop

October 2017

Lick Observatory

## Service and Outreach

Graduate study group in astronomy

April 2018 - Present

Leading a bi-weekly, peer-led group on paper discussions and professional

development.

Diversity and Inclusion in Physics

October 2017 - Present

Attend and facilitate weekly meetings on equity issues in the department.

Rebuilt website.

Astronomy on Tap

May 2018 - Present

Helped put on free monthly public astronomy talks.