Jenna Samuel

Graduate Student 1 Shields Ave Davis, CA 95616 jsamuel@ucdavis.edu https://jennasamuel.com/

Education University of California, Davis

September 2015 - Present

Ph.D. in Physics

Advisor: Andrew Wetzel

McNair Graduate Fellow 2015 - 2016

Florida International University

B.S. in Physics

McNair Scholar 2014 - 2015

January 2011 - May 2015

Research

Graduate Research

January 2018 - Present

University of California, Davis

Advisor: Andrew Wetzel

• Exploring the orbital histories of satellite galaxies around isolated Milky Way-like galaxies and Local Group-like pairs in the FIRE2 simulations. Using Python to quantify the spatial and kinematic coherence of satellites over time and compare to Local Group observations.

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 photoproduction cross section of vector mesons produced by a photon beam incident on a liquid Helium target.

Science Undergraduate Laboratory Internship Thomas Jefferson National Accelerator Facility May - August 2014

Advisors: Valery Kubarovsky, Joerg Reinhold

• Summer internship program funded by the U.S. Department of Energy. Characterized detector properties of multi-anode photomultipliers for a Cherenkov radiation detector used in particle spectroscopy.

Publications

A profile in FIRE: resolving the radial distributions of satellite galaxies in the Local Group with simulations

J. Samuel et al.

MNRAS, 2020

Star formation histories of dwarf galaxies in the FIRE simulations: dependence on mass and Local Group environment

S. Garrison-Kimmel et al. incl. J. Samuel

MNRAS, 2019

Talks and posters

The spatial distribution of satellite galaxies around MW/M31-mass hosts in the FIRE simulations

Poster, Santa Cruz Galaxy Workshop

August 2019

Spacecraft of Apollo 11

Public talk, Astronomy on Tap - Davis

September 2019

Service and Outreach

Diversity and Inclusion in Physics

October 2017 - Present

• Attend and facilitate weekly meetings on equity issues in the department. Created peer-mentoring workshop series.

Astronomy on Tap, Davis

May 2018 - Present

• Co-organizer for free, monthly, public astronomy talks by writing trivia and interacting with guests.

CUWiP 2019

June 2018 - January 2019

• Member of the local organizing committee for the Conference for Undergraduate Women in Physics at UC Davis. Planned lodging, laboratory tours, transportation, and recruitment of 150 attendees.

Teaching

Teaching Assistant

September 2016 - June 2019

University of California, Davis

• TA for introductory astronomy classes, upper division math methods for physics majors, and introductory physics labs. Held weekly office hours, graded assignments and exams, and led review sessions.

Learning Assistant

August 2012 - April 2015

Florida International University

• Facilitated experiments in introductory and modern physics labs. Helped students learn basic programming skills for physics research, and held weekly office hours.

Observing

Lick AGN Monitoring Project

March 2017

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