Lorena Mezini – Curriculum Vitae

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Personal Profile

I am a fifth year PhD candidate of the University of Pittsburgh Department of Physics and Astronomy physics PhD program working with Professor Andrew Zentner to develop a gravitational lensing model.

Education

2013-2014 BS Physics - Mount Holyoke College, South Hadley, MA

Transferred to Stony Brook University Spring 2015

2015-2017 BS Physics and BS Astronomy - Stony Brook University, Stony Brook, NY

2018- PhD Physics - University of Pittsburgh, Pittsburgh, PA

First Author Papers

• Influence of Subhalos on Host Halo Properties (Monthly Notices of the Royal Astronomical Society, September 2023)

Co Author Papers

• Evidence of galaxy assembly bias in SDSS DR7 galaxy samples from count statistics (Monthly Notices of the Royal Astronomical Society, November 2022)

Research Notes

• Using Maximum Circular Velocity in Halo Occupation Distribution Models to Predict Galaxy Clustering (Research Notes of the AAS, April 2022)

Employment History

Fall 2018 - University of Pittsburgh Department of Physics and Astronomy present GSR/TA

I have been a teaching assistant for multiple introductory physics and astronomy courses and held graduate student researcher positions.

Software Experience

• Languages: Python

• Domain Knowledge: Git & GitHub, Markov chain Monte Carlo (MCMC) using emcee, Lenstronomy, Pandas, Astropy

Awards

• Whittington Leadership and Innovation Challenge for Ph.D. Students (Fall 2021 - Spring 2022)

Extracurricular Activities

- Women and Minorities in Physics Club: Served as zine editor and on the social media committee from Fall 2019 Fall 2020, President from Spring 2021 Spring 2022, and Vice President from Fall 2022 present
- Direct Action Coalition (February 2023 present): I helped found this group to address the systemic inequities that actively affect the lived experiences of members of the Department of Physics and Astronomy at the University of Pittsburgh
- University of Pittsburgh Physics department Equity and Inclusion Committee (Spring 2021 present)
- Graduate Student Mentor (Aug 2022 April 2023): I mentored a small group of University of Pittsburgh Physics PhD students during their first year.
- 2022 ACCelerate Creativity + Innovation Festival I spoke to the public about the Dark Energy Spectroscopic Instrument (DESI) in an exhibit called *Making the Largest Maps of the Universe*.

Languages

• Albanian (fluent)