Amber K. Lenon

Education

Syracuse UniversitySyracuse, NYPHD IN PHYSICSJan 2020 - May 2021West Virginia UniversityMorgantown, WV

West Virginia University
MS IN PHYSICS

Syracuse University

BS IN PHYSICS

Aug 2013 - May 2016

Aug 2016 - Dec 2019

Syracuse, NY

Awards

PAARE Fellowship, Syracuse University
CGR Oral Award, Outstanding Graduate Oral Presentation – National Society of Black
Physicists
Chancellor's Scholars Fellow, West Virginia University

2019
W.E.B Du Bois Fellowship, West Virginia University
2016-2019

Publications _____

Short Author - Refereed and Preprints:

- 4. **Amber K Lenon**, Duncan A Brown, Alexander H Nitz, *Eccentric Binary Neutron Star Search Prospects for Cosmic Explorer*, arXiv:2103.14088, (2021), Submitted to Phys. Rev. D.
- 3. Kenneth Herner, James Annis, Alyssa Garcia, Marcelle Soares-Santos, Dillon Brout, Noemi Glaeser, Nora Sherman, Richard Kessler, Robert Morgan, Antonella Palmese, Francisco Paz-Chinchon, **Amber Lenon**, and Tristan Bachmann, *The updated DESGW processing pipeline for the third LIGO/VIRGO observing run*, EDP Sciences, 245, 01008, (2020).
- 2. **Amber K Lenon**, Alexander H Nitz, Duncan A Brown, *Measuring the eccentricity of GW170817 and GW190425*, Mon. Not. R. Astron Soc., Volume 497, Issue 2, September 2020, Pages 1966–1971.
- 1. Alexander H Nitz, **Amber K Lenon**, Duncan A Brown, *Search for Eccentric Binary Neutron Star Mergers in the first and second observing runs of Advanced LIGO*, Astrophys. J., Volume 890, Number 1, 2020 February 6

LIGO Scientific Collaboration Publications:

Following are publications that I contributed to as a member of the collaboration:

- 3. B. P. Abbott et al., *GW151226*: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence, Phys. Rev. Lett., 116, 241103 (2016).
- 2. B. P. Abbott et al., *GW150914: First Results from the Search for Binary Black Hole Coalescence with Advanced LIGO*, Phys. Rev. D 93, 122003 (2016).
- 1. B. P. Abbott et al., Observation of Gravitational Waves from a Binary Black Hole Merger, Phys. Rev. Lett., 116, 061102 (2016).

Presentations

Contributed Talks:

- Measuring the Eccentricity of GW170817 and GW190425, National Society of Black Physicists, November 2020, Virtual due to COVID-19
- Measuring the Eccentricity of GW170817 and GW190425, Society for Advancement of Chicanos/Hispanics and Native Americans in Science, October 2020, Virtual due to COVID-19
- Searching for Gravitational Waves from Eccentric Binary Neutron Stars, National Society of Black Physicists, November 2019
- Improving LIGO Sensitivity to Eccentric Searches, National Society of Black Physicists, November 2018

Invited Speaker:

• Astronomy II: Talk with Gravitational Wave Physicists, Columbus, OH, April 2020

Professional Development _____

Research Scientist

FERMI NATIONAL ACCELERATOR LABORATORY

Southern Data Science Conference

VIRTUAL DUE TO COVID-19

Southern Data Science Conference

ORLANDO, FL

Internship

May 2018 - Aug 2018

Conference

Aug 2020

Conference Oct 2018

Skills _____

Python (Numpy, H5py, Pandas, Matplotlib, Scipy), Jupyter Notebook, Bash, Languages

git, HTCondor, MySQL

Statistical Modeling Bayesian Inference, Matched Filtering