PERSONAL INFO

Contact

 ★ 39 Brainerd Ave. Middletown, CT 06459
➡ mtea@wesleyan.edu
↓ 1.740.751.7714

Online

- S mvtea.github.io
- ♥ @masonvtea
- in masonvtea
- **O** mvtea

EDUCATION

WESLEYAN UNIVERSITY

Middletown, CT

B.A. ASTRONOMY

August 2017 - June 2021 Awarded departmental high honors

B.A. PHYSICS August 2017 - June 2021

NORTH UNION HS

Richwood, Ohio

HIGH SCHOOL DIPLOMA

August 2013 - May 2017 Graduated with honors

TECHNICAL SKILLS

LANGUAGES

Python, SQL, C, HTML/CSS, μ_{TEX}

OPERATING SYSTEMS

Unix, OSX, Windows

Tools

Git, CIAO, Sherpa, BigQuery, Microsoft Office, Adobe Acrobat, Jupyter Notebook

LIBRARIES

numpy, matplotlib, pandas, scipy, astropy

RESEARCH

CHARACTERIZING X-RAY BINARIES IN NEARBY GALAXIES

Spring 2020 – Spring 2021 | Wesleyan University, Department of Astronomy

Worked with **Dr. Roy Kilgard** on identifying and characterizing black hole X-ray binaries in the local universe with archival *Chandra* data.

SIMULATING THE SOLAR GRAVITATIONAL LENS

Fall 2017 – Spring 2020 | Wesleyan University, Department of Astronomy

Worked with **Dr. Seth Redfield** to develop a Python raytracer capable of simulating images from the Solar Gravitational Lens (SGL).

EXPERIENCE

ASSOCIATE SYSTEMS ENGINEER I, JWST INTEGRATION & TESTING August 2021 - Present | Space Telescope Science Institute

TEACHING ASSISTANT, SUMMER SCIENCE PROGRAM June 2021 - July 2021 | Virtual

STUDENT DIRECTOR, VAN VLECK OBSERVATORY

Summer 2019 – Spring 2021 | Wesleyan University

<u>CO-INSTRUCTOR</u>, OBSERVATIONAL ASTRONOMY

Spring 2021 | Wesleyan University

COURSE ASSISTANT, INTRODUCTION TO ASTROPHYSICS Fall 2020 | Wesleyan University

COURSE ASSISTANT, THE UNIVERSE

Fall 2019 | Wesleyan University

HONORS & AWARDS

High Honors in Astronomy, Wesleyan University
NASA CT Space Grant Consortium Undergraduate Fellowship
Wesleyan University Summer Research Fellow
NASA CT Space Grant Consortium Undergraduate Scholarship
Wesleyan University Summer Research Fellow

PUBLICATIONS

Tea, M V, Kilgard, R E (2021). A probabilistic classification scheme for ultraluminous X-ray binaries. In prep.

Tea, MV (2021). Identifying, Classifying, and Contextualizing Bright X-ray Binaries in the Local Universe with Chandra. Wesleyan University honors thesis. High honors.

Tea, MV, Redfield S (2020). *Imaging Alien Earths with the Solar Gravitational Lens*. Proceedings of the 30th Keck Northeast Astronomy Consortium Undergraduate Research Symposium, 99-103.

PRESENTATIONS

- 2021 **Poster** 237th Meeting of the American Astronomical Society
- 2020 Poster Wesleyan University Summer Research Symposium
- 2019 Talk 30th KNAC Undergraduate Research Symposium
- 2019 **Poster** Wesleyan University Summer Research Symposium