

KARINA KIMANI-STEWART

25 Park Pl NE, Atlanta, GA 30303

kkimanistewart1@gsu.edu ✦ ORCID: 0000-0002-6825-351X

EDUCATION

<i>PhD, Astronomy</i> Georgia State University	(anticipated) May 2030
<i>Master of Science, Physics</i> Georgia State University	May 2026
<i>Bachelor of Science, Physics (Astrophysics Concentration)</i> Texas Tech University	May 2024

AWARDS AND FELLOWSHIPS

AAS Chambliss Astronomy Achievement Student Award (Graduate Division)
Second Century Initiative Doctoral Fellow
Department of Physics and Astronomy Annual Poster Competition (First Place)

SELECT RESEARCH PROJECTS

Stellar Variability of Nearby M Dwarf Exoplanet Hosts <i>Georgia State University</i> Determined stellar rotation rates of all M dwarfs within 25 pc using optical photometric data from <i>TESS</i> , ASAS-SN, and ZTF to investigate the trends between stellar activity and planetary presence.	May 2024 - Present
High Radio Frequency Pulsar Search of the Galactic Center <i>NSF REU - West Virginia University</i> Conducted a search of the Galactic Center for new pulsars, fast radio bursts, and other emitters of single-pulse radio signal with data from the 100-m Green Bank Telescope.	May 2022 - March 2026
Near-Infrared Transmission Spectra with CRIRES+ <i>NSF REU - University of Florida</i> Utilized transmission spectra features from HD209458b as a template to construct a new data reduction pipeline for the upgraded CRIRES+ spectrograph on the VLT.	May 2023 - August 2023
Spectral Analysis of Brown Dwarfs with gollum <i>TAURUS Scholars Program - University of Texas at Austin</i> Constrained parameters of brown dwarf atmospheres and contributed to the development of atmospheric modeling Python package, <i>gollum</i> .	May 2021 - August 2021

SELECT PUBLICATIONS

Kimani-Stewart, K., Kar, A., Henry, T.,..., *REMIX15: M Dwarf Rotation as an Indicator of Angular Momentum Transfer to Planets*, ApJ, in prep

Turtelboom, E. V., Gialalone, S., Gore, R., Dressing, C., ... **Kimani-Stewart, K.**, ..., *Uniform Metallicity Measurements of M Dwarf Planet Hosts Support Metallicity- Dependent sub-Neptune Formation*, ApJ, Volume 172, Issue 2, doi:10.3847/1538-3881/ae8850

Kimani-Stewart, K., McLaughlin, M. A., Fiore, W., *High Radio Frequency Pulsar Search of the Galactic Center*, RNAAS, Volume 10, Issue 3, doi:10.3847/2515-5172/ae522f.

Bentz, M. C., Alahakone, R., Azoulay, L., ..., **Kimani-Stewart, K.**, ..., *Broad-band Monitoring of 797 Montana*, The Minor Planet Bulletin, Vol. 52, No. 3, pp. 207-208, 2025.

Bentz, M. C., Brown, R., Carrazco-Gaxiola, S., ..., **Kimani-Stewart, K.**, ..., *R-Band Monitoring of Patroclus and Menoetius Mutual Events*, The Minor Planet Bulletin, Vol. 52, No. 1, pp. 79-81, 2025.

Shankar, S., Gully-Santiago, M., Morely, C., ..., **Kimani-Stewart, K.**, ..., *gollum: An intuitive programmatic and visual interface for precomputed synthetic spectral model grids*, Journal of Open Source Software, vol. 9, Issue 100, 2024.

TEACHING EXPERIENCE

Georgia State University <i>Co-Lecturer</i> Astronomy 1020 Lecture	June 2026 - July 2026
<i>Lab Instructor</i> Astronomy 1020 Lab	August 2024 - Present
<i>Lab Instructor</i> Astronomy 1010 Lab	January 2025 - May 2025
Texas Tech University <i>Lab Assistant</i> Astronomy 2401 Lecture	August 2023 - December 2023

OBSERVING EXPERIENCE

- 0.9m SMARTS Cerro Tololo International Observatory - Cerro Tololo, Chile
- 1.5m SMARTS Cerro Tololo International Observatory - Cerro Tololo, Chile
- 3.5m Apache Point Observatory - Sunspot, NM
- 0.6m Hard Labor Creek Obsrvatory - Rutledge, GA
- 12in Preston Gott Skyview Observatory - Shallowater, TX

LEADERSHIP

Physics Graduate Student Association - Faculty Liaison	May 2026 - Present
Astronomy Peer Advising Leadership Program - Peer Advising Leader	June 2026 - Present
Women in Physics, Texas Tech University Chapter - President	May 2022 - May 2024