

Teja Teppala

teja.teppala@missouri.edu
teja.teppala@gmail.com

Phone: (573) 825-4874
tejateppala.github.io

EDUCATION

University of Missouri, Columbia

- Ph.D. - Physics (Cumulative GPA: 3.576/4.0) July 2025
- Graduate Certificate - Public Engagement July 2023
- Master of Science - Physics July 2022

University of Hyderabad, Hyderabad, India

- Integrated Master of Science - Physics (Cumulative GPA: 8.63/10.0) October 2018

RESEARCH EXPERIENCE

Graduate Student, University of Missouri - Columbia

2019 - July 2025

Topic: *Bursty star formation in low-mass galaxies.*

- Visually classified optical Keck-DEIMOS spectra from the HALO7D survey.
- Modeling star formation histories to understand starbursts and physical conditions in high-z low-mass galaxies.

Project Assistant, University of Hyderabad

2017 - 2019

Topic: *Investigation of SPITZER mid-infrared spectra on a sample of Ultra Large/ Large Infrared Galaxies to understand the role of Polycyclic Aromatic Hydrocarbons (PAHs).*

- Reduced SPITZER mid-infrared spectra of an Ultra Large/ Large Infrared Galaxies sample; studied strengths of Polycyclic Aromatic Hydrocarbons (PAH) emission lines using PAHFIT.

Contributions to submitted observing proposals

Securing Spectroscopic Redshifts in a Galaxy-Galaxy Lensing System at Redshift of 1.

Principal Investigator: Prof. Yicheng Guo

Gemini Observatory 2024A Fast Turnaround Proposal - Submitted February 2024; Accepted March 2024.

Role: *Designed the target field and set up for the observations. Reduced the data.*

LEADERSHIP, SERVICE & OUTREACH

Founder, President

October 2024 - July 2025

Mizzou Science Policy Advocacy Network (M-SPAN), University of Missouri, Columbia

- Overseeing all activities and meetings; representing the organization in official matters; working with the professional development & research committee to draft and publish policy briefs and memos.

Vice President

April 2024 - April 2025

Graduate Professional Council, University of Missouri, Columbia

- Chaired all assembly meetings; prepared agendas for Executive Officer, Executive Board, and Assembly meetings; oversaw internal operations; and assisted the President in day-to-day operations.

AVID Mentor

February 2024 - May 2025

The Bridge - College of Education & Human Development, University of Missouri, Columbia

- Mentored sophomore students at Battle High School to prepare them for college and future careers.
- Mentored 7th grade students at Lange Middle School, and guiding them to explore their potential and learn through hands-on experiences.

Organizer and Member - Eclipse Stars Program

January - April 2024

Great American Eclipse Viewing Party, University of Missouri, Columbia

- Planned and organized a viewing party on campus for the Great American Eclipse on April 8, 2024; collaborated with MU Extension, with support from the Astronomical Society of the Pacific.
- Provided logistical and technical support to MU Extension programs along the path of totality in Missouri.

Organizer and NASA Partner Eclipse Ambassador
Partial Eclipse Viewing Party, University of Missouri, Columbia

August - October 2023

- Planned and organized a viewing party at the Lowry Mall on campus for the partial solar eclipse on October 14, 2023. Set up telescopes and provided eclipse glasses and informational material to attendees.
- Collaborated with MU Extension, and the Division of Inclusion, Diversity, and Equity, University of Missouri; supported by the Astronomical Society of the Pacific.
- Number of attendees: ~ 250 . External links to media coverage: Columbia Missourian, KOMU

Assistant Director of Programming
Graduate Professional Council, University of Missouri, Columbia

August 2023 - April 2024

- Co-lead the Programming Committee of the Graduate Professional Council; assisted GPC events and the Research & Creative Activities Forum (RCAF).

Co-Director - Publicity Team
Missouri International Student Council, University of Missouri, Columbia

June 2023 - April 2024

- Co-lead the Publicity Team of the Missouri International Student Council; responsible for the organization's image on campus: social media, graphic design, photography, and videography.

Student Volunteer
Laws Observatory, University of Missouri, Columbia

June 2021 - present

- Operating and maintaining the telescopes; performing demonstrations to the general public; maintaining the observatory and keeping records.

Outreach Coordinator
Physics & Astronomy Graduate Student Association, University of Missouri, Columbia

January 2021 - December 2024

- Giving presentations, coordinating and organizing public outreach events for the Department of Physics and Astronomy.

HONORS & AWARDS

AAAS CASE Workshop Award Spring 2025
Graduate School, University of Missouri

Mizzou 18 Award Spring 2025
Mizzou Alumni Association, University of Missouri

Remington R. Williams Award Summer 2024
Board of Curators, University of Missouri

Mary Elizabeth Gutermuth Award for Community Engagement Spring 2024
Graduate School, University of Missouri

Sandra K. Abell Science Education Award Spring 2024
Graduate School, University of Missouri

O. M. Stewart Scholarship Summer 2023, Summer 2024
Department of Physics and Astronomy, University of Missouri

James L. and Dora D. Ferguson Fund for Excellence in Physics Fall 2019
Department of Physics and Astronomy, University of Missouri

SKILLS

- **Event planning & coordination**
- **Drafting policy briefs and memos**
- **Typesetting software and applications:** L^AT_EX, Microsoft Office, GitHub Pages, WordPress, Drupal
- **Communication, outreach & social media:** Graphic design, content creation
- **Programming Languages:** Python, C, C++, FORTRAN, Bash
- **Astronomy software packages:** TOPCAT, DS9, IRAF

TEACHING EXPERIENCE

Graduate Teaching Assistant, University of Missouri, Columbia

- **Instructor:** ASTRON 1020 - Introduction to Laboratory Astronomy Spring 2023 - Spring 2025
Responsibilities: Developed and delivered 15 two-hour lecture and laboratory sessions to a group of 20 undergraduate students each semester.
- **Discussion TA:** PHYSICS 1220 - College Physics II Fall 2023 - Spring 2025
Responsibilities: Led discussion sessions for 70 undergraduate students each semester; explained physics concepts and their applications, and solved problems while engaging the students.
- **Grader:** ASTRON 1010 - Introduction to Astronomy Fall 2019, Spring 2023
PHYSICS 3150 - Introduction to Modern Physics Fall 2019
Responsibilities: Graded lab reports of 200 undergraduate students for ASTRON 1010 each semester.
Graded homework for PHYSICS 3150.

PROFESSIONAL MEMBERSHIPS

Member, Rollins Society April 2024 - present
Honors society of graduate and professional students at the University of Missouri.

Member, American Association for the Advancement of Science January 2024 - present

Member, National Science Policy Network January 2024 - present

Member, Sigma Pi Sigma April 2022 - present
University of Missouri chapter of the Physics & Astronomy honor society.

Member, American Astronomical Society September 2021 - present

PUBLICATIONS

Published in peer-reviewed journals

1. Pharo, J., Guo, Y.,..., Teppala, T., et. al., **Dwarf Galaxies Show Little ISM Evolution from $z \sim 1$ to $z \sim 0$: A Spectroscopic Study of Metallicity, Star Formation, and Electron Density**, 2023, ApJ, 959, 48
2. Pharo, J., Guo, Y.,..., Teppala, T., et. al., **The Dwarf Galaxy Population at $z \sim 0.7$: A Catalog of Emission Lines and Redshifts from Deep Keck Observations**, 2022, ApJS, 261, 12.

In preparation

1. **Teppala, T., Guo, Y., Pharo, J., ..., et. al., Quantifying Timescales of Starbursts in Low-Mass Galaxies using Helium Recombination Lines**, 2025.
2. **Teppala, T., Guo, Y., A Study of Physical Conditions of Ionized Gas in High- z Galaxies Using JWST/NIRSpec Spectroscopy**, 2025.

PRESENTATIONS

Oral presentations

1. Bursts Unpacked: Revealing Star-formation Timescales (BURST), *Mid-American Regional Astrophysics Conference (MARAC)*, December 2024.
2. Hydrodynamical simulations of the galaxy populations, *Astronomy seminar*, October 2023.
3. Investigating star formation in low-mass galaxies, *Astronomy seminar*, October 2022.
4. Investigating star formation in low-mass galaxies, *Mid-American Regional Astrophysics Conference (MARAC)*, October 2022.

Poster presentations

1. Investigating star formation burstiness in low-mass galaxies using Helium recombination lines, *240th meeting of the American Astronomical Society, Pasadena CA*, June 2022.