SHIVANI P. SHAH

shivani.shah@ufl.edu — Website — ADS Library

EDUCATION

University of Florida May 2020 – Present
Ph.D., Astronomy
Thesis Title: *TBD*
Advised by: Prof. Rana Ezzeddine

University of Florida August 2018 – May 2020
M.S., Astronomy
Thesis Title: *Methods to Robustly Constrain Standard Siren H0 Measurement*
Advised by: Prof. Paul Torrey

The Pennsylvania State University August 2014 – May 2018
B.S., Astronomy & Astrophysics

FIRST-AUTHOR PUBLICATIONS

4. Shah, S. P., Ezzeddine, R. 2024. *The R-Process Alliance: Actinide Mass Fraction of R-Process Enhanced Stars.* In prep.

3. Shah, S. P., Ezzeddine, R., Roederer, I. U., Hansen, T. T., et al. 2024. *The R-Process Alliance: detailed chemical composition of an r-process enhanced star with UV and optical spectroscopy* MNRAS, 529, 1917. https://doi.org/10.1093/mnras/stae255

2. Shah, S. P., Ezzeddine, R., Ji, A. P., Hansen, T. T., Catelan, M., Roederer, I. U., et al. 2023. *Uranium Abundances and Ages of R-Process Enhanced Stars Using Novel U II Lines.* ApJ, 948, 2. https://doi.org/10.3847/1538-4357/acb8af

1. Shah, S. P., Wright, J. T., Isaacson, H., Howard, A. W., & Curtis, J. L. 2018. *HD 4915: A Maunder Minimum Candidate.* ApJL, 863, 2.
https://doi.org/10.3847/2041-8213/aad40c

CONTRIBUTING-AUTHOR PUBLICATIONS

Bandyopadhyay, A., Ezzeddine, R., Prieto, C. A., Aria, N. **Shah, S.P.**, et al. *The R-Process Alliance: An Abundance Study of Faint Metal-Poor Stars observed by the GTC.*
To be submitted to ApJ 05/05/2024.

Ji, A. P., Curtis, S., Storm, N., [...] **Shah, S.P.** et al. 2024. *Spectacular Nucleosynthesis from Early Massive Stars.* ApJL, 962, 2.
https://doi.org/10.3847/2041-8213/ad19c4

AWARDS & HONORS

CLAS Dissertation Fellowship — Summer 2024
College of Liberal Arts and Sciences, UF — *$8000*

Travel Grants — 2023 - 2024
College of Liberal Arts and Sciences & Astronomy Department, UF — *$2000*

Symposium Award — Fall 2023
Astronomy Department, UF — *$200*

Dean's List — 5 semesters
The Pennyslvania State University

Cooper's Honor Program — Fall 2014
Penn State, Brandywine

OBSERVING AWARDS

PI: HIRES/Keck — Spring 2021
New U lines for Nucleocosmochronometry — *4 hrs*

PI: HoRuS/Grand Telescopio CANARIAS — Spring 2021
Age Estimate of an r-process Enhanced Star using Nucleocosmochronometry — *2 hrs*
(Not executed since the instrument had to be decommissioned.)

Co-I: HoRuS/Grand Telescopio CANARIAS — Fall 2020
Characterizing r-process nucleosynthesis of enhanced r-process stars — *20 hrs*

INVITED TALKS

Lunch Seminar — Spring 2024
Heavy Element Signatures in Metal-Poor Stars — *Carnegie Observatories*

Simple Words Seminar — November 2023
Radioactive-Dating of Stars — *Math Department, UF*

CONTRIBUTED TALKS

SDSS-V Collaboration Meeting — August 2023
Halo Stars as Probes of Heavy Element Enrichment — *Flatiron Institute*

CeNAM Frontiers Meeting — May 2023
U Abundances and Ages of R-Process Enhanced Stars — *Michigan State University*

Annual Graduate Student Symposium — October 2022
The Ages and R-Process Enrichment of Population II Stars — *University of Florida*

JINA-CEE Frontiers in Nuclear Astrophysics Conference — May 2022
Overview of Heavy Element Observations — *University of Notre Dame*

Annual Graduate Student Symposium — September 2019
H_0 *in the Era of LIGO* — *University of Florida*

Penn State Lunch Talk Series — September 2017
HD 4915: A Maunder Minimum Candidate — *PSU, University Park*

POSTER PRESENTATIONS

JINA-CEE Frontiers in Nuclear Astrophysics Conference — May 2022
Actinide Abundances Using Novel Uranium Lines — *University of Notre Dame*

Fall Undergraduate Poster Exhibition — October 2017
HD 4915: A Maunder Minimum Candidate — *PSU, University Park*

231st AAS Poster Presentation [id. 349.11] — January 2018
Grand Magnetic Minimum Candiate — *Washington D.C.*

EURECA Symposium — April 2015
Population III White Dwarfs — *PSU, Brandywine*

TEACHING

Teacher's Assistant — 2018-2019
AST 1002 — *University of Florida*

Teacher's Assistant — 2021 Spring
AST 1022L Course Revamp — *University of Florida*

ACADEMIC ADVISING

Isabella Macias — 2022-present
Li-Enhanced Stars — *Undergraduate Student at UF*

Natalia Wollschlaeger — 2022
Highly R-Process Enhanced Star, J1453+0040 — *Undergraduate Student at UF*

SERVICE

Mentor — 2024-
Women in Astronomy Mentorship Program — *University of Florida*

Organizing Committee — 2021-2022
JINA-CEE 2022 Frontiers in Nuclear Astrophysics — *University of Notre Dame*

Vice-President — 2018-2019
Graduate Astronomy Organization — *University of Florida*

OUTREACH

Volunteer — Spring 2023
NSF Broader Impacts: Spectroscopy and the Origin of Elements — *University of Florida*

Volunteer — Fall 2022
Public Observing Nights — *University of Florida*

Volunteer — November 2019
UF Starry Night — *University of Florida*

Volunteer — November 2018
Girls Do Science — *Florida of Natural History Museum*

Volunteer — July 2016
Penn State AstroFest — *PSU, University Park*

Co-founder — 2014
Astronomy Club — *PSU, Brandywine*