

# SHIVANI SHAH

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## EDUCATION

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<b>University of Florida</b> Ph.D., Astronomy	May 2020 –
<b>University of Florida</b> M.S., Astronomy GPA: 4.00/4.00	August 2018 – May 2020
<b>The Pennsylvania State University</b> B.S., Astronomy & Astrophysics GPA: 3.58/4.00	August 2014 – May 2018

## PUBLICATIONS

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*“HD 4915: A Maunder Minimum Candidate”*

**Shah, Shivani P.**, Wright, Jason T., Isaacson, Howard, Howard, Andrew W., & Curtis, Jason L.  
2018, ApJ, 863, 2  
<https://doi.org/10.3847/2041-8213/aad40c>

## RESEARCH EXPERIENCE

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<b>Graduate Researcher</b> <i>Advisor: Prof. Rana Ezzeddine</i>	June 2020 – <i>University of Florida</i>
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- Analyzing a metal-poor star in the optical and near-UV band to obtain a complete inventory of rapid neutron capture process elemental abundances
- Using the abundance pattern to constrain theoretical models for the production of heavy elements

<b>Graduate Researcher</b> <i>Advisors: Profs. Paul Torrey, Steve Eikenberry, Anthony Gonzalez</i>	August 2018 – <i>University of Florida</i>
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- Generated and analyzed a suite of constrained cosmological simulations, ARCID
- Used ARCID to investigate systematic errors in the first standard siren Hubble constant measurement obtained using GW170817

<b>Undergraduate Researcher</b> <i>Advisor: Prof. Jason Wright</i>	January 2016 – May 2018 <i>PSU, University Park</i>
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- Analyzed the magnetic behaviour of HD 4915, a Sun-like star showcasing grand magnetic minimum-like behavior
- Developed scripts and a GUI to expedite the curation of [exoplanets.org](https://exoplanets.org)
- Investigated the relationship between radial velocity and magnetic activity of Sun-like stars

<b>Undergraduate Researcher</b> <i>Advisor: Prof. Timothy Lawlor</i>	January - May 2016 <i>PSU, Brandywine</i>
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- Employed BRAHMA, a FORTRAN code to model the evolution of POP III stars from main-sequence stage to white-dwarf stage
- Analyzed the relationship between the initial and final stellar parameters of the modeled POP III stars

## PRESENTATIONS

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**Annual Graduate Student Symposium***H<sub>0</sub> in the Era of LIGO*

September 2019

*University of Florida***231st AAS Poster Presentation [id. 349.11]***Grand Magnetic Minimum Candidate*

January 2018

*Washington D.C.***Fall Undergraduate Poster Exhibition***HD 4915: A Maunder Minimum Candidate*

October 2017

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

September 2017

*PSU, University Park***EURECA Symposium***Population III White Dwarfs*

April 2015

*PSU, Brandywine***TECHNICAL SKILLS**

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Python, IDL, C, C++, L<sup>A</sup>T<sub>E</sub>X, Linux, MATLAB, PyRAF**OUTREACH**

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**Volunteer***UF Starry Night*

November 2019

*University of Florida***Volunteer***Penn State AstroFest*

July 2016

*PSU, University Park***Co-founder***Astronomy Club*

2014

*PSU, Brandywine*