

# Joseph Alexander Guidry

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## EDUCATION

### THE UNIVERSITY OF TEXAS AT AUSTIN

B.S. IN ASTRONOMY

B.S. IN PHYSICS

Austin, TX

Expected graduation: May 2021

Cum. GPA: 3.69

## LINKS

Website:// [astrojoeg.github.io](https://astrojoeg.github.io/)

Github:// [astrojoeg](#)

LinkedIn:// [astrojoeg](#)

ORCID:// [Joseph Guidry](#)

Twitter:// [@astrojoeg](#)

## WORK EXPERIENCE

### FRI WHITE DWARF STARS STREAM | PEER MENTOR

January 2019 – present | UT Austin

- Served as an upperclassman mentor to the students of the white dwarf FRI stream by assisting them with their weekly labs and advising them on their research projects. Student-lead inquiry is driven by employing Socratic methods.

### DEPARTMENT OF ASTRONOMY | UNDERGRADUATE RESEARCHER

June 2018 – present | UT Austin

- Worked on research projects under the advising of Dr. Michael Montgomery. During summers 2018, 2020 worked full time on paid fellowships. During the school year worked part time unfunded.

## PUBLICATIONS

### REFEREED FIRST-AUTHORED PUBLICATIONS:

- Joseph A. Guidry, JJ Hermes, Zachary P. Vanderbosch, et al. 2020, in prep. *I Spy Variability: Detecting Variable White Dwarfs Using Variability Metrics from Gaia and Zwicky Transient Facility Photometry*

## PRESENTATIONS

### CONTRIBUTED TALKS

- 1-Minute Colloquium, *I Spy Variability: A New System of Variability Metrics from Gaia and Zwicky Transient Facility Photometry to Discover Variable White Dwarfs*, Dept. of Astronomy, UT Austin, September 2020
- Astronomy Undergraduate Research Symposium, *I Spy Variability: A New System of Variability Metrics from Gaia and Zwicky Transient Facility Photometry to Discover Variable White Dwarfs*, Dept. of Astronomy, UT Austin, August 2020

### POSTERS

- Undergraduate Research Forum, *Searching for Color Changes During Outburst*, April 2020, Austin, TX
- Frank N. Bash Symposium, *Searching for Color Changes During Outburst*, October 2019, Austin, TX
- TASC5/KASC12, *Searching for Color Changes During Outburst*, July 2019, Cambridge, MA
- Undergraduate Research Forum, *Searching for Color Changes During Outburst*, April 2019, Austin, TX

### OUTREACH TALKS

- Rapid-Fire Talk at Astronomy on Tap ATX #62, *What is the life cycle of a star?*, November 19, 2019, Austin, TX
- Astronomy Students Association, *Searching for Color Changes During Outburst*, October 2019, Austin, TX

## OBSERVING EXPERIENCE

Fifteen nights of observing experience on-site at McDonald 2.1-m, 0.9-m, 0.8-m. Eight nights spent remote observing on McDonald 0.8-m.

### TIME AWARDED

- As PI: 5.5 hrs on McDonald 0.8-m as student in AST 376, May 2020

## AWARDS AND FELLOWSHIPS

2020	Abel Family Scholarship in Physics	Department of Physics, UT Austin
2020	NSC Endowed Service Scholarship	Natural Sciences Council, UT Austin
2020	Summer Undergraduate Research Fellowship	J. W. Cox Endowment for the Advanced Studies in Astronomy
2019	Melvin J. Rieger Scholarship Fund in Physics	Department of Physics, UT Austin
2019	C. M. & J. C. Thompson Scholarship in Physics	Department of Physics, UT Austin
2019	CNS Second Year Excellence Award	College of Natural Sciences, UT Austin
2018	Dr. H. Franklyn Alexander Endowed Scholarship	College of Natural Sciences, UT Austin
2018	TIDES FRI Summer Research Fellowship	Texas Institute for Discovery Education in Science, UT Austin

## LEADERSHIP AND SERVICE

### APPOINTED AND ELECTED POSITIONS

- Appointed to the 2019 - 2020 College of Natural Sciences College Tuition and Budget Advisory Committee (CTBAC), November 2019
- Elected Co-President for the Astronomy Students Association, May 2019 - present
- Appointed Undergraduate Representative for the Department of Astronomy, May 2018 - present
- Elected Webmaster for the Astronomy Students Association, May 2018 — May 2019

### VOLUNTEER BASIS

- Mentor for the Graduate-Undergraduate Mentorship in AstronoMY (GUMMY), Fall 2019 - present
- Space Cadet and Telescope Operator for Astronomy on Tap ATX, August 2019 - February 2020 (due to COVID-19)
- Informal Mentor for University of Texas NSF REU for Astronomy, June — August 2019
- Physics Math & Astronomy Board for Student Advocacy Officer for Undergraduate Peer Advising and Co-founder, May 2019 — present
- Co-founder of and activist within People for PMA, **the grassroots movement responsible for the renaming of Robert Lee Moore Hall to the Physics, Mathematics, and Astronomy Building in July 2020**, November 2017 — present

### STUDENT ORGANIZATION INVOLVEMENT

Prior to the COVID-19 crisis, I committed over 10 hours each semester to community outreach through the following student organizations.

- Sigma Pi Sigma Physics Honor Society, May 2019 — present
- Gender Minorities in Physics, August 2018 — present
- Society of Physics Students, August 2017 — present
- Astronomy Students Association, August 2017 — present

## MENTORING

Fall 2020 — present	Mentoring an undergraduate through the Physics Department mentoring program
Fall 2019 — present	Mentoring an undergraduate for Graduate-Undergraduate Mentoring in AstronoMY (GUMMY)
Summer 2019	Informal Mentor for a scholar in the UT Austin NSF REU in Astronomy
Spring 2019 — present	Advised multiple projects as a Peer Mentor in the FRI White Dwarf stream, including PI-ing a project in Fall 2020 to analyze the color of bright variable white dwarfs with TESS

## ADDITIONAL SKILLS

- Programming: proficient in Python, learning Julia, computational skills in Mathematica
- Data reductions and automated observing scripts in IRAF
- Document preparation in  $\text{\LaTeX}$
- 5 hours of teaching field experience at Brentwood Elementary (AISD) while a student in UTS 101 (UTeach, UT Austin)

## REFERENCES

Dr. Mike Montgomery	The University of Texas at Austin (mikemon@astro.as.utexas.edu)
Prof. Volker Bromm	The University of Texas at Austin (chair@astro.as.utexas.edu)
Prof. Steven Finkelstein	The University of Texas at Austin (stevenf@astro.as.utexas.edu)