## Kendall Sullivan

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**EDUCATION** 

### University of Texas at Austin, Austin TX

Ph.D. student, Astronomy Advisor: Prof. Adam Kraus

## University of Massachusetts, Amherst, MA

B.S. Physics and Astronomy, February 2018, Cum Laude Commonwealth Honors College Scholar with Great Distinction

Departmental Honors in Astronomy

Honors Thesis: S and VV Corona Australis: Two Extreme Young Binary Systems, Advisors: Dr. Lisa Prato (Lowell Observatory) and Professor Suzan Edwards (Smith College)

GPA: 3.76, Dean's List 6 of 7 semesters

RESEARCH EXPERIENCE

#### Lowell Observatory

Research Asistant, Advisor: Dr. Lisa Prato

Jan 2018 - August 2018

- Conducted near infrared spectroscopic analysis of young binary stars
- Developed and applied analysis codes to a variety of systems, including finding and confirming spectroscopic binaries
- Assisted with data reduction and other tasks as needed

# Northern Arizona University/Lowell Observatory

REU student, Advisor: Dr. Lisa Prato

June 2017 - August 2017

- Conducted near infrared spectroscopic analysis of young binary stars
- Developed and applied analysis codes to a variety of systems, including deconvolving spectra of close binaries
- Worked within larger team on a young binary stars database

### Five College Astronomy Department

- Observed at Kitt Peak National Observatory WIYN 0.9m for four nights
- Reduced and analyzed data studying blue compact dwarf galaxies with HI companion clouds
- Follow-up observations taken at KPNO WIYN 0.9m for two nights in March 2018 (PI: K. Sullivan)

Five College Astronomy Department Summer Intern

June 2016 - August 2016

Advisor: Prof. Daniel Wang

- Worked full-time continuing research from the school year
- Attended week-long group meeting in Madison WI to present work

Research Assistant, Advisor: Prof. Daniel Wang

Sept. 2015 - Jan. 2017

- Developed analysis pipeline for Faraday Rotation Measure Synthesis of JVLA data
- Worked individually and in a research group to develop and check analysis techniques
- Work on RM-synthesis of edge-on spiral galaxies lead to co-authorship on CHANG-ES VIII

OBSERVING
EXPERIENCE
AND SUCCESSFUL
PROPOSALS

### **Infrared Telescope Facility**

iSHELL - 4 half nights

August 2019

• Short Term Variability in Two Young Binary Star Systems; PI: K. Sullivan, Co-Is: L. Prato, Joe Llama

#### Kitt Peak National Observatory

WIYN 0.9m telescope - 4 nights WIYN 0.9m telescope - 2 nights January 2017

March 2018

• Observing a New Tail in the Blue Compact Dwarf Galaxy NGC 4861; PI: K. Sullivan, Co-I: Dr. Anne Jaskot, Rachel O'Connor

OTHER EXPERIENCE

#### University of Massachusetts Learning Resource Center

Peer Tutor/Tutor Peer Mentor

Sept 2015 - December 2017

- Peer tutor for math, physics, and astronomy
- Led group and individual tutoring sessions
- Provided additional support for new tutors and evaluated peers as a tutor peer mentor (Sept. 2016 - Dec. 2018)

#### Five College Astronomy Club

President

May 2017 - December 2017

Sept 2016 - May 2017

Diversity coordinator

- Served as liaison between Astronomy majors and the Astronomy Department
- Served as a resource for students looking do research within the department or find internships and REUs
- Participated in mentoring program in 2016 2017 school year
- Established Diversity Coordinator position to create focus on inclusion in Astronomy

### **Orchard Hill Observatory**

Assistant Director

May 2017 - December 2017

- Helped open, manage, and run weekly public nights at 16-inch telescope on campus, attended by students and members of the public
- Organized and planned private events for clubs, dorm residents, and members of the community (Boy Scout troops, etc).
- Managed repairs and cleaning for telescope

Publications

- Sullivan, K., Prato, L., Edwards, S., et al., Accretion and variability in S Corona Australis and VV Corona Australis, APJ, 2019
- L. Flagg, et al. (includes K. Sullivan), CO Detected in CI Tau b: Hot Start Implied by Planet Mass and  $M_K$ , APJ Letters, 2019
- J. Irwin, et al. (includes K. Sullivan), CHANG-ES VIII. Uncovering hidden AGN activity in radio polarization, MNRAS, 464, 2, 1333-1346, 2017.

Talks and Colloquia

Young Binary Stars: Two Representative Systems, Colloquium at Lowell Observatory

Observing Young Binary Stars, Talk to Austin Astronomical Society April 2019

Programming

Proficient: Python, IDL

Languages

Familiar: Java, MATLAB, HTML, IRAF

SERVICE AND

Undergraduate mentor (Jan. 2019 - present)

Mentoring

Assistant, Undergraduate Python Bootcamp, Summer 2019

FELLOWSHIPS AND University of Texas at Austin

SCHOLARSHIPS Graduate School Fellowship Sept. 2018 - Sept. 2019

Graduate School Fellowship Jun - Aug., 2020 and 2021

University of Massachusetts, Amherst

David. J. Van Blerkom Research Fellowship in Astronomy June 2016

Honors College Research Fellowship Sept. 2016 - Dec. 2016

 $First \ Author \qquad \textit{Veiling and Accretion Around the Young Binary Stars S} \ \textit{and VV Corona Australis},$ 

Posters The 231st meeting of the American Astronomical Society (January 2018)