Dr. Kendall Sullivan (they/them)

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Employment History

Sept. 2023 – present	**Postdoctoral Scholar,** University of California Santa Cruz Supervisor: Prof. Natalie Batalha
Sept. 2020 – Aug. 2023	**NSF Graduate Research Fellow,** University of Texas at Austin Thesis Advisor: Prof. Adam Kraus
Jan. 2018 – Sept. 2018	**Post-Baccalaureate Researcher,** Lowell Observatory Supervisor: Dr. Lisa Prato

Education

Aug. 2023	**Ph.D., Astronomy** University of Texas at Austin *Revealing Star and Planet Formation With Stellar Multiplicity*
Feb. 2018	**B.S., Physics/Astronomy, cum laude** University of Massachusetts Amherst Commonwealth Honors College Scholar with Great Distinction Departmental Honors in Astronomy *S and VV Coronae Australis: Two Extreme Young Binary Systems*

Awards and Fellowships

2023	**Rodger Doxsey Dissertation Award**, American Astronomical Society
2020	**Board of Visitors Second Year Defense Award**, University of Texas at Austin
	Graduate Research Fellowship (5 years), National Science Foundation
2018	**Dean's Unrestricted Fellowship (5 years)**, University of Texas at Austin
	Astronomy Dept. Recruitment Fellowship (2 summers), University of Texas at Austin

Selected Invited and Contributed Talks

Oct. 2024	University of Wisconsin – Madison (invited seminar)
Sept. 2024	Yale University (invited seminar)
June 2024	Cool Stars 22 (contributed plenary)
April 2024	Penn State/Center for Exoplanets and Habitable Worlds (invited seminar)
March 2024	Extreme Solar Systems V (contributed plenary)
Feb. 2023	Jet Propulsion Lab Exoplanet Seminar (invited seminar)
Jan. 2023	NASA ExoPAG 27 Early Career Symposium (contributed plenary)
Oct. 2022	University of Hawai'i/IfA (invited seminar)

PI Observing Programs

NOIRLab/NN-Explore	**WIYN 3.5m/NEID - 7h**, 2025A
Lick Observatory	**Shane 3-m/ShaneAO + ShARCS - 8 nights**, 2024 A+B
	Automated Planet Finder - 100 hours, 2024B
	Nickel 1-m/CCD-C2 - 20 nights, 2024A

PI Observing Programs (continued)

McDonald Observatory
- **Hobby-Eberly Telescope/LRS2 - 231 hours**, 6 trimesters over 2021-2023 (PI; 163 h); 2025-2,-3 (science PI; 68 h)

NOIRLab/NOAO
- **Gemini South/GMOS - 2.2 hours**, 2021B
- **IRTF/iSHELL - 4 half nights**, 2019B
- **KPNO/WIYN 0.9m telescope - 2 nights**, 2017/2018

Service

AAS Journals; A&A; Nature
- **Referee**, 2023 – present

NASA
- **ExoPAG SIG2 on Exoplanet Demographics**, 2023–present
- **Grant Review Panel Executive Secretary**, 2 years

UC Observatories, NOIRlab
- **Time Allocation Committee**, multiple semesters

UT Austin
- **Graduate-Undergraduate Mentoring Program co-lead**, 2021–2023
- **TAURUS/REU weekly seminar lead organizer**, 2 years
- **Graduate Student Assembly Representative**, 2021–2022

Outreach

Nature
- **News and Views author:** *Dying stars give a second wind to exoplanet formation*, May 2025

UC Santa Cruz
- **Astronomy on Tap speaker**, May 2025
- **Ask an Astronomer**, 2024–present

Teaching Experience

UC Santa Cruz
- **ASTR 112 (Physics of Stars) instructor**, Spring 2025

UT Austin
- **TAURUS/REU Introduction to Astronomy Jargon Seminar developer and lead**, 2 summers

Mentored Students

UC Santa Cruz
- **Astrophel Fong**, Lamat scholar, June 2025 – Aug. 2025
- **Nina Carrillo**, UCSC undergraduate research and senior thesis, Sept. 2024–Dec. 2025
- **Ira Gupta**, UCSC undergraduate research, Sept. 2024–June 2025
- **2 ASTR 9 groups**, 4-6 students, Winter and Spring quarters 2024 + 2025
- **M Clark**, Lamat scholar and University of Wisconsin - Madison undergraduate, June 2024 – Dec. 2024

UT Austin
- **Nathanael Burns-Watson**, UT REU, Case Western Reserve University senior thesis, UT graduate student, June 2023–present
- **Hunter Brooks**, Northern Arizona University undergraduate, Jan. 2022–Feb. 2023

Publications (First-author = 10; * shows a student publication.)

1. N. Burns-Watson*, K. **Sullivan**, and A. L. Kraus, "Determining the Host Stars of Planets in Binary Star Systems with Asterodensity Profiling: Investigating the Canonical Radius Gap", In review (2025).
2. E. Evans, T. Dupuy, and K. **Sullivan**, et al., "Orbital Architectures of Planet-Hosting Binaries IV. Mutual Inclinations Between Planetary and Stellar Orbits Across Different Binary Properties", In review (2025).
3. K. Sullivan, A. Dattilo, and N. M. Batalha, "The First Occurrence Rate Estimates for Exoplanets in Small-Separation Binary Star Systems", In review (2025).
4. K. Sullivan, A. L. Kraus, T. A. Berger, and D. Huber, "Quantifying the Contamination from nearby Stellar Companions in Gaia DR3 Photometry", AJ **169**, 29, 29 (2025).
5. M. Clark*, K. **Sullivan**, and M. Soares-Furtado, "Moderate-separation Binary Companions May Influence Young Stellar X-Ray Luminosity", Research Notes of the American Astronomical Society **8**, 318, 318 (2024).
6. E. L. Evans, T. J. Dupuy, K. **Sullivan**, A. L. Kraus, D. Huber, M. J. Ireland, M. Ansdell, R. L. Kuruwita, R. A. Martinez, and M. L. Wood, "Orbital architectures of planet-hosting binaries - III. Testing mutual inclinations of stellar and planetary orbits in triple-star systems", MNRAS **534**, 575–607 (2024).
7. E. Gaidos, C. A. Clark, and K. **Sullivan**, "The Mass–Radius Relation for Planets in Binary Systems", Research Notes of the American Astronomical Society **8**, 319, 319 (2024).
8. K. Sullivan and A. L. Kraus, "Starspots and Undetected Binary Stars Have Distinct Signatures in Young Stellar Associations", ApJ **969**, 117, 117 (2024).
9. K. Sullivan, A. L. Kraus, T. A. Berger, T. J. Dupuy, E. Evans, E. Gaidos, D. Huber, M. J. Ireland, A. W. Mann, E. A. Petigura, P. C. Thao, M. L. Wood, and J. Zhang, "Revising Properties of Planet–Host Binary Systems. IV. The Radius Distribution of Small Planets in Binary Star Systems Is Dependent on Stellar Separation", AJ **168**, 129, 129 (2024).
10. K. Sullivan, A. L. Kraus, D. Huber, E. A. Petigura, E. Evans, T. Dupuy, J. Zhang, T. A. Berger, E. Gaidos, and A. W. Mann, "Revising Properties of Planet-Host Binary Systems. III. There Is No Observed Radius Gap for Kepler Planets in Binary Star Systems", AJ **165**, 177, 177 (2023).
11. K. Sullivan and A. L. Kraus, "Optical and Near-infrared Excesses are Correlated in T Tauri Stars", ApJ **928**, 134, 134 (2022).
12. K. Sullivan and A. L. Kraus, "Revising Properties of Planet-Host Binary Systems. II. Apparent Near-Earth-analog Planets in Binaries Are Often Sub-Neptunes", AJ **164**, 138, 138 (2022).
13. K. Sullivan, A. L. Kraus, and A. W. Mann, "Revising Properties of Planet-Host Binary Systems. I. Methods and Pilot Study", ApJ **935**, 141, 141 (2022).
14. L. A. Nofi, C. M. Johns-Krull, R. López-Valdivia, L. Biddle, A. S. Carvalho, D. Huber, D. Jaffe, J. Llama, G. Mace, L. Prato, B. Skiff, K. R. Sokal, K. **Sullivan**, and J. Tayar, "Projected Rotational Velocities and Fundamental Properties of Low-mass Pre-main-sequence Stars in the Taurus-Auriga Star-forming Region", ApJ **911**, 138, 138 (2021).
15. K. Sullivan and A. L. Kraus, "Undetected Binary Stars Cause an Observed Mass-dependent Age Gradient in Upper Scorpius", ApJ **912**, 137, 137 (2021).

16 L. Flagg, C. M. Johns-Krull, L. Nofi, J. Llama, L. Prato, K. **Sullivan**, D. T. Jaffe, and G. Mace, "CO Detected in CI Tau b: Hot Start Implied by Planet Mass and M_K", ApJL **878**, L37, L37 (2019).

17 K. Sullivan, L. Prato, S. Edwards, I. Avilez, and G. H. Schaefer, "S and VV Corona Australis: Spectroscopic Variability in Two Young Binary Star Systems", ApJ **884**, 28, 28 (2019).

18 J. A. Irwin, P. Schmidt, A. Damas-Segovia, R. Beck, J. English, G. Heald, R. N. Henriksen, M. Krause, J.-T. Li, R. J. Rand, Q. D. Wang, T. Wiegert, P. Kamieneski, D. Paré, and K. **Sullivan**, "CHANG-ES - VIII. Uncovering hidden AGN activity in radio polarization", MNRAS **464**, 1333–1346 (2017).