

Research Interests	Exoplanet statistics and characterization Architectures and dynamics of planetary systems	
Appointments	University of California, Los Angeles 51 Pegasi b Postdoctoral Fellow Supervisor: Erik Petigura Center for Astrophysics Harvard & Smithsonian 51 Pegasi b Postdoctoral Fellow Supervisor: Dave Charbonneau	Los Angeles, CA 10/2025 – present Cambridge, MA 09/2023 – 09/2025
Education	Princeton University Ph.D., Astrophysics; M.Sc., Astrophysics (2020) Thesis: <i>The TESS Grand Unified Hot Jupiter Survey</i> Advisor: Joshua Winn California Institute of Technology B.S., Physics, with Minor in Geological and Planetary Sciences	Princeton, NJ 09/2018 – 08/2023 Pasadena, CA 09/2014 – 06/2018
Awards	Heising-Simons 51 Pegasi b Fellowship Princeton University Centennial Fellowship George W. Housner Prize for Academic Excellence and Original Research Best Poster, Know Thy Star Conference	2023 – 2027 2018 – 2023 2018 2017
Publication Summary (see below for full list)	19 major author (1st–3rd author) publications 33 contributing author publications	[ADS Library] [ADS Library]
Observing Programs	Summary: I have led as PI or co-PI observing programs across more than 100 nights on various ground-based facilities, including 35 nights on 6–10m class telescopes. Keck – 6 nights (NASA / NOIRLab); 3 nights (UC Observatories) Gemini-North – 7.6 nights (NOIRLab) Magellan – 19.5 nights (Princeton / Harvard) WIYN 3.5m – 27 nights (NOIRLab) CTIO 1.5m – 43 nights (NOIRLab)	
Advising	Jea Adams Redai – Harvard PhD Student <i>Discovery of a Brown Dwarf Transiting a Thick Disk Star</i> Victoria DiTomaso – Harvard PhD Student <i>A Homogeneous Spectroscopic Analysis of Hot Jupiter Host Stars</i> Tarisai Dziire – NYU Shanghai Undergraduate <i>Characterizing the Hot Jupiter with the Largest TTVs</i>	
Grants	Heising-Simons 51 Pegasi b Fellowship NASA Keck PI Data Awards (Science PI, 2022B–2023B)	\$415k \$45k

NASA WIYN PI Data Awards (Science PI, 2021B-2023B) \$39k

Selected Presentations	University of Hawai'i Astronomy Colloquium (<i>invited seminar</i>)	Nov 2025
	UCLA EPSS Department Colloquium (<i>invited seminar</i>)	Nov 2025
	UT Austin Department of Astronomy Colloquium (<i>invited seminar</i>)	Mar 2025
	Know thy Star 2, Pasadena (<i>contributed talk</i>)	Feb 2025
	Michigan State University Astronomy Colloquium, Lansing, MI (<i>invited seminar</i>)	Nov 2024
	Exoplanets V, Leiden (<i>contributed plenary session talk</i>)	Jun 2024
	Extreme Solar Systems V, Christchurch (<i>contributed talk</i>)	Mar 2024
	Open Problems in the Astrophysics of Gas Giants, Puerto Natales (<i>contributed talk</i>)	Dec 2023
	Harvard CfA Exoplanet Pizza Lunch (<i>invited seminar</i>)	Oct 2023
	AAS General Meeting 241, Seattle (<i>contributed talk</i>)	Jan 2023
	TESS Science Team Meeting #29, Cambridge, MA (<i>contributed talk</i>)	Oct 2022
	Harvard CfA Seminar, Cambridge, MA (<i>invited seminar</i>)	Oct 2022
	MIT TESS Science Talk, Cambridge, MA (<i>invited seminar</i>)	Oct 2022
	ERES VII, State College (<i>contributed talk</i>)	Aug 2022
	Exoplanets IV, Las Vegas (<i>contributed plenary session talk</i>)	May 2022
	Yale Exoplanets and Stars Seminar (<i>invited seminar</i>)	Apr 2022
	AAS Division of Dynamical Astronomy Meeting 52, online (<i>contributed talk</i>)	May 2021

Teaching	Assistant in Instruction	Princeton
	<i>AST 205, Planets in the Universe</i>	Sep 2019 – Jan 2020
	Teaching Assistant	Caltech
	<i>Ph 12c, Statistical Mechanics</i>	Mar 2018 – Jun 2018
	<i>Ph 12b, Quantum Mechanics</i>	Jan 2018 – Mar 2018
	Peer Tutor	Caltech, 2016 – 2018

Professional Activities	Referee, <i>AAS Journals, MNRAS, A&A, PASP</i>	2020 – present
	Panel Member, NASA and NOIRLab Time Allocation Committees	2024 – present
	External Panelist, JWST and HST Time Allocation Committees	2024 – present
	Expert Reviewer, NASA Peer Review Panel	2025
	External Reviewer, Canada Time Allocation Committee	2025
	Virtual Organizing Committee, <i>Emerging Researchers in Exoplanet Science (ERES) V</i>	2021

Code	Bhatti, W., Bouma, L., & Yee, S. W. <i>cdips-pipeline: difference-imaging photometry pipeline</i>	
	Yee, S. W., Petigura, E., von Braun, K. <i>SpecMatch-Emp: stellar characterization using an empirical spectral library</i>	

Press Coverage	<i>CNN</i> : This exoplanet is in a death dance with its star	
	<i>Popular Science</i> : This pitch-black exoplanet is spiraling toward its doom	

Outreach & Service	<i>Princeton Public Observing</i> : Organize and host members of the public at observing events using the Princeton department telescope.	
	<i>Intro2Astro</i> : Gave lectures for Intro2Astro, an online summer course introducing students to astronomy research.	
	<i>Astro Department Graduate Student Mentorship Program</i> , Princeton University	
	<i>Graduate Student Buddy Program</i> , Princeton University	

Major Author Publications [\[ADS Library\]](#)

13 first author, 3 led by students I have directly mentored (denoted by †).

19. † Dziire, T., **Yee, S. W.**, et al. *Confirmation of the Hot Jupiter with the Largest TTVs and its Non-Transiting Companion*. in prep (2025).
18. †DiTomasso, V., **Yee, S. W.**, et al. *A Sample of Thick Disk Stars Hosting Hot Jupiters*. submitted to AAS Journals (2025).
17. †Adams Redai, J., Chanda, V., **Yee, S. W.**, †DiTomasso, V. et al. *The First Transiting Brown Dwarf Orbiting a Thick Disk Star*. under review at ApJ Letters (2025). [[arXiv:2512.06069](#)]
16. **Yee, S. W.** & Vissapragada, S. *Popcorn Planets are Not Inflated by Eccentricity Tides*. under review at ApJ Letters (2025). [[arXiv:2511.07746](#)]
15. **Yee, S. W.**, Tamburo, P., Stefansson, G., et al. *The Polar Orbit of TOI-2374 b, a Planet in the Neptunian Ridge*. AJ, 170, 275.
14. Tamburo, P., **Yee, S. W.**, García-Mejía, J. et al. *Spot-Crossing Variations Confirm a Misaligned Orbit for a Planet Transiting an M Dwarf*. AJ, 170, 200 (2025).
13. **Yee, S. W.**, Winn, J., Hartman, J., et al. *The TESS Grand Unified Hot Jupiter Survey III. Thirty New Planets*. ApJS, 280, 30 (2025).
12. Tamburo, P., **Yee, S. W.**, García-Mejía, J. et al. *The True Stellar Obliquity of a Sub-Saturn Planet from the Tierras Observatory and KPF*. AJ, 170, 34 (2025).
11. **Yee, S. W.**, Stefansson, G., Thorngren, D. P. et al. *The Super-Puff WASP-193 b is on a Well-Aligned Orbit*. AJ, 169, 225 (2025).
10. McKee, B., Montet, B., **Yee, S. W.** et al. *A Planet Candidate Orbiting near the Hot Jupiter TOI-2818 b Inferred through Transit Timing*. ApJ, 981, 106 (2025).
9. **Yee, S. W.**, Petigura, E., Isaacson, H., et al. *Additional Doppler Monitoring Corroborates HAT-P-11c as a Planet*. RNAAS, 8, 187 (2024).
8. **Yee, S. W.** & Winn, J. *The Period Distribution of Hot Jupiters is Not Dependent on Host Star Metallicity*. ApJL, 949, L21 (2023).
7. **Yee, S. W.**, Winn, J., Hartman, J., et al. *The TESS Grand Unified Hot Jupiter Survey II. Twenty New Giant Planets*. ApJS, 265, 1 (2023).
6. **Yee, S. W.**, Winn, J., Hartman, J., et al. *The TESS Grand Unified Hot Jupiter Survey I. Ten TESS Planets*. AJ, 164, 70 (2022).
5. **Yee, S. W.**, Winn, J. & Hartman, J. *How Complete Are Surveys for Nearby Transiting Hot Jupiters?* AJ, 162, 240 (2021).
4. **Yee, S. W.**, Tamayo, D., Hadden, S. & Winn, J. *How Close are Compact Multi-Planet Systems to the Stability Limit?* AJ, 162, 55 (2021).
3. **Yee, S. W.**, Winn, J., Knutson, H., et al. *The Orbit of WASP-12b is Decaying*. ApJL, 888, L5 (2020).
2. **Yee, S. W.**, Petigura, E., Fulton, B., et al. *HAT-P-11: Discovery of a Second Planet and a Clue to Understanding Exoplanet Obliquities*. AJ, 155, 255 (2018).
1. **Yee, S. W.**, Petigura, E. & von Braun, K. *Precision Stellar Characterization of FGKM Stars using an Empirical Spectral Library*. ApJ, 836, 77 (2017).

Contributing Author Publications [\[ADS Library\]](#)

33. Bieryla, A., et al. incl. **Yee, S. W.** *TOI-6692b: An eccentric 130 day period giant planet with a single transit from TESS.* submitted to AAS Journals (2025).
32. Quinn, S., et al. incl. **Yee, S. W.** *TOI-2494 b and TOI-5143 b: a pair of hot giant planets flanked by inner small planets.* submitted to AAS Journals (2025).
31. Wu, Y., et al. incl. **Yee, S. W.** *Detection of four cold Jupiters through combined analyses of radial velocity and astrometry data.* submitted to AAS Journals (2025).
30. Gomez Barrientos, J., et al. incl. **Yee, S. W.** *From Earths to Super-Earths: Five New Small Planets Transiting M Dwarf Stars.* accepted to AJ (2025).
29. Manni, F., et al. incl. **Yee, S. W.** *The Hot Neptune Initiative (HONEI) II. TOI-5795 b: A hot super-Neptune orbiting a metal-poor star.* A&A, 701, 230 (2025).
28. Schulte, J., et al. incl. **Yee, S. W.** *Migration and Evolution of giant ExoPlanets (MEEP) II: Super-Jupiters and Lithium-rich Host Stars.* MNRAS, 543, 292 (2025).
27. Essack, Z., et al. incl. **Yee, S. W.** *Giant Outer Transiting Exoplanet Mass (GOT 'EM) Survey. VI: Confirmation of a Long-Period Giant Planet Discovered with a Single TESS Transit.* AJ, 170, 109 (2025).
26. Naponeillo, L., et al. incl. **Yee, S. W.** *The Hot-Neptune Initiative (HONEI) I. Two hot sub-Neptunes on a close-in, eccentric orbit (TOI-5800 b) and a farther-out, circular orbit (TOI-5817 b).* A&A, 701, 79 (2025).
25. Howard, A. W., et al. incl. **Yee, S. W.** *Planet Masses, Radii, and Orbits from NASA's K2 Mission.* ApJS, 278, 52 (2025).
24. Brinkman, C. L., et al. incl. **Yee, S. W.** *The Compositions of Rocky Planets in Close-in Orbits Tend to be Earth-Like* AJ, 170, 109 (2025).
23. Hon, M., et al. incl. **Yee, S. W.** *A Disintegrating Rocky Planet with Prominent Comet-like Tails Around a Bright Star.* ApJL, 984, L3 (2025).
22. Van Zandt, J., et al. incl. **Yee, S. W.** *The TESS-Keck Survey XXIV: Outer Giants may be More Prevalent in the Presence of Inner Small Planets.* AJ, 169, 235 (2025).
21. Saunders, N., et al. incl. **Yee, S. W.** *TESS Giants Transiting Giants. VII. A Hot Saturn Orbiting an Oscillating Red Giant Star.* AJ, 169, 75 (2025).
20. Ehrhardt, J., et al. incl. **Yee, S. W.** *Confirmation of four Hot Jupiters detected by TESS using follow-up spectroscopy from MaHPS at Wendelstein together with NEID and TRES.* A&A, 692, 220 (2024).
19. Isaacson, H., et al. incl. **Yee, S. W.** *The California Legacy Survey. V. Cataloging Chromospheric Activity Cycles of Planet Search Stars.* ApJS, 274, 35 (2024).
18. Alqasim, A., et al. incl. **Yee, S. W.** *TOI-757 b: an eccentric transiting mini-Neptune on a 17.5-d orbit.* MNRAS, 533, 1 (2024).
17. Radzom, B., et al. incl. **Yee, S. W.** *Evidence for Primordial Alignment: Insights from Stellar Obliquity Measurements for Compact Sub-Saturn Systems.* AJ, 168, 116 (2024).
16. Dai, F., et al. incl. **Yee, S. W.** *An Earth-sized Planet on the Verge of Tidal Disruption.* AJ, 168, 101 (2024).
15. Hacker, A., et al. incl. **Yee, S. W.** *TOI-2374 b and TOI-3071 b: two metal-rich sub-Saturns well within the Neptunian desert.* MNRAS, 532, 1612 (2024).
14. Schulte, J., et al. incl. **Yee, S. W.** *Migration and Evolution of giant ExoPlanets (MEEP) I: Nine Newly Confirmed Hot Jupiters from the TESS Mission.* AJ, 168, 101 (2024).
13. Polanski, A., et al. incl. **Yee, S. W.** *The TESS-Keck Survey XX: 15 New TESS Planets and a Uniform RV Analysis of all Survey Targets.* ApJS, 272, 32 (2024).
12. Loudon, E., et al. incl. **Yee, S. W.** *A Larger Sample Confirms Small Planets Around Hot Stars Are Misaligned.* ApJL, 968, L2 (2024).
11. Battley, M., et al. incl. **Yee, S. W.** *NGTS-30 b/TOI-4862 b: An ~1 Gyr old 98-day transiting warm Jupiter.* A&A, 686,

10. Hu, Q., et al. incl. **Yee, S. W.** *The PFS view of TOI-677 b: A spin-orbit aligned warm Jupiter in a dynamically hot system.* AJ, 167, 175 (2024).
9. Rubenzahl, R., et al. incl. **Yee, S. W.** *The TESS-Keck Survey. XII. A Dense $1.8 R_{\oplus}$ Ultra-Short-Period Planet Possibly Clinging to a High-Mean-Molecular-Weight Atmosphere After the First Gyr.* AJ, 167, 53 (2024).
8. Delamer, M., et al. incl. **Yee, S. W.** *TOI-4201: An Early M-dwarf Hosting a Massive Transiting Jupiter Stretching Theories of Core Accretion.* ApJL, 962, L22 (2024).
7. Schmidt, S., et al. incl. **Yee, S. W.** *Verification of Gaia DR3 Single-lined Spectroscopic Binary Solutions With Three Transiting Low-mass Secondaries.* AJ, 166, 225 (2023).
6. Psaridi, A., et al. incl. **Yee, S. W.** *Three Saturn-mass planets transiting F-type stars revealed with TESS and HARPS.* A&A, 675, A39 (2023).
5. MacDougall, M. G. et al., incl. **Yee, S. W.** *The TESS-Keck Survey. XV. Precise Properties of 108 TESS Planets and Their Host Stars.* AJ, 166, 33 (2023).
4. Zink, J. K. et al., incl. **Yee, S. W.** *Scaling K2. VI. Reduced Small Planet Occurrence in High Galactic Amplitude Stars.* AJ, 165, 262 (2023).
3. Fraizer, R. C. et al., incl. **Yee, S. W.** *NEID Reveals that The Young Warm Neptune TOI 2076b Has a Low Obliquity.* ApJL, 944, L41 (2023).
2. Essack, Z. E. et al., incl. **Yee, S. W.** *TOI-1075 b: A Dense, Massive, Ultra-Short Period Hot Super-Earth Straddling the Radius Gap.* AJ, 165, 47 (2023).
1. Petigura, E. et al., incl. **Yee, S. W.** *Planet Candidates from K2 Campaigns 5-8 and Follow-up Optical Spectroscopy.* AJ, 155, 21 (2018).