

Gavin Wang

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Education

California Institute of Technology	Pasadena, CA
Ph.D. in Astrophysics	<i>Sept. 2026 –</i>
Johns Hopkins University	Baltimore, MD
B.S. in Physics	<i>Aug. 2022 – May 2026</i>

Research Positions

California Institute of Technology	Pasadena, CA
Graduate Researcher	<i>Sept. 2026 –</i>
Carnegie Observatories	Pasadena, CA
Astrophysics Summer Intern	<i>June 2025 – Aug. 2025</i>
California Institute of Technology	Pasadena, CA
Summer Undergraduate Research Fellow	<i>June 2024 – Aug. 2024</i>
Johns Hopkins University	Baltimore, MD
Undergraduate Researcher	<i>Apr. 2023 – May 2025</i>
Space Telescope Science Institute	Baltimore, MD
Undergraduate Researcher	<i>Jan. 2022 – Aug. 2026</i>

Awards & Honors

Donald E. Kerr Memorial Award , JHU	<i>Apr. 2026</i>
Graduate Research Fellowship , NSF	<i>Apr. 2026</i>
Astronaut Scholarship , Astronaut Scholarship Foundation	<i>May 2025</i>
Barry M. Goldwater Scholarship , Goldwater Foundation	<i>Mar. 2025</i>
Sigma Pi Sigma , JHU	<i>May 2024</i>
Summer Undergraduate Research Fellowship , Caltech	<i>Apr. 2024</i>
Provost's Undergraduate Research Award , JHU	<i>Oct. 2022</i>

Observing Programs

PI of NOIRLab 2025A-416224 (23 hours, MINERVA-Australis)	
“Unlocking the periods and masses of two young long-period planets”	<i>2025</i>
Co-I of ESO P117.2AJM (2 hours, VLTI/GRAVITY)	
“An in-depth view of the HD 114082 planetary system with GRAVITY+”	<i>2026</i>
Co-I of JWST GO-6915 (47 hours)	
“Direct Detection and Characterization of a Nearby Temperate Giant Planet”	<i>2025</i>
Co-I of APO 3.5m (14.5 hours)	
“Synergistic Cool Star Monitoring”	<i>2024</i>

Presentations

Invited Talks

TESS Science Talks @ MIT

Searching for Transit Depth Variability with TESS

Boston, MA

Mar. 2024

Contributed Talks

Exoplanets 6 (Plenary)

A JWST/NIRSpec Phase Curve of the Ultra-Short Period Rocky Planet K2-141 b

Porto, Portugal

June 2026

Carnegie Summer Student Symposium

Searching for Atmospheric Escape on Three Hot Jupiters with MIKE

Pasadena, CA

Aug. 2025

Astronaut Scholar Technical Conference

Measuring the Mass of the Largest Known Extrasolar Planet

Houston, TX

Aug. 2025

Caltech SURF Seminar Day

Atmospheric Retrievals of a Brown Dwarf with KPIC

Pasadena, CA

Aug. 2024

Posters

247th AAS Meeting

Searching for Atmospheric Escape with the MIKE Spectrograph

Phoenix, AZ

Jan. 2026

International Conference on Exoplanets and Planet Formation

A Spectroscopic Phase Curve of K2-141 b, an Ultra-Short Period Rocky Planet

Shanghai, China

Dec. 2025

TESS Science Conference III

A Blind Search for Transit Depth Variability with TESS

Boston, MA

Aug. 2024

JHU Day of Undergraduate Research Symposium

Ibid.

Baltimore, MD

Oct. 2023

54th Annual Meeting of the AAS Division for Planetary Sciences

Constraints on Transit Depth Variations of Known Exoplanets with TESS

Virtual

Oct. 2022

53rd Annual Meeting of the AAS Division for Planetary Sciences

Developing a Tool to Automate the Search for NEBs Among TOIs

Virtual

Oct. 2021

TESS Science Conference II

Analyzing FFIIs to Identify False Positives within TESS Candidates

Virtual

Aug. 2021

Publications

First-author

3. **Wang**, Xuan, González Picos et al., “Chemical and Isotopic Homogeneity Between the L Dwarf CD-35 2722 B and its Early M Host Star,” *ApJ* (2026), 997, 195.
2. **Wang**, Balmer, Pueyo et al., “A Revised Density Estimate for the Largest Known Exoplanet, HAT-P-67 b,” *AJ* (2025), 169, 336.
1. **Wang** & Espinoza, “A Blind Search for Transit Depth Variability with TESS,” *AJ* (2024), 167, 1.

TESS Collaboration Co-author

28. Yee, Winn, Hartman et al. (including **Wang**), “The TESS Grand Unified Hot Jupiter Survey. III. Thirty More Giant Planets,” *ApJS* (2025), 280, 30.

27. Christian, Vanderburg, Becker et al. (including **Wang**), “Wide Binary Orbits Are Preferentially Aligned with the Orbits of Small Planets, but Probably Not Hot Jupiters,” *AJ* (2025), 169, 308.
26. Barkaoui, Korth, Gaidos et al. (including **Wang**), “TOI-2015 b: A sub-Neptune in strong gravitational interaction with an outer non-transiting planet,” *A&A* (2025), 695, A281.
25. Armstrong, Osborn, Burn et al. (including **Wang**), “The NCORES Program: Precise planetary masses, null results, and insight into the planet mass distribution near the radius gap,” *MNRAS* (2025), 537, 3175.
24. Tala Pinto, Jordán, Acuña et al. (including **Wang**), “Three warm Jupiters orbiting TOI-6628, TOI-3837, and TOI-5027 and one sub-Saturn orbiting TOI-2328,” *A&A* (2025), 694, A268.
23. Masuda, Libby-Roberts, Livingston et al. (including **Wang**), “A Fourth Planet in the Kepler-51 System Revealed by Transit Timing Variations,” *AJ* (2024), 168, 294.
22. Schulte, Rodriguez, Bieryla et al. (including **Wang**), “Migration and evolution of giant ExoPlanets (MEEP). I. Nine Newly Confirmed Hot Jupiters from the TESS Mission,” *AJ* (2024), 168, 32.
21. Zhang, Weiss, Huber et al. (including **Wang**), “Dynamical Architectures of S-type Transiting Planets in Binaries. I. Target Selection Using Hipparcos and Gaia Proper Motion Anomalies,” *AJ* (2024), 167, 89.
20. Chontos, Huber, Grunblatt et al. (including **Wang**), “The TESS-Keck Survey XXI: 13 New Planets and Homogeneous Properties for 21 Subgiant Systems,” *arXiv* (2024), arXiv:2402.07893.
19. Yahalomi, Kipping, Nesvorný et al. (including **Wang**), “Not-so-fast Kepler-1513: a perturbing planetary interloper in the exomoon corridor,” *MNRAS* (2024), 527, 620.
18. Sha, Vanderburg, Huang et al. (including **Wang**), “TESS spots a mini-neptune interior to a hot saturn in the TOI-2000 system,” *MNRAS* (2023), 524, 1113.
17. Peterson, Benneke, Collins et al. (including **Wang**), “A temperate Earth-sized planet with tidal heating transiting an M6 star,” *Nature* (2023), 617, 701.
16. Barros, Demangeon, Armstrong et al. (including **Wang**), “The young mini-Neptune HD 207496b that is either a naked core or on the verge of becoming one,” *A&A* (2023), 673, A4.
15. Caciapuoti, Inno, Covone et al. (including **Wang**), “TESS discovery of a super-Earth and two sub-Neptunes orbiting the bright, nearby, Sun-like star HD 22946,” *A&A* (2022), 668, A85.
14. Chaturvedi, Bluhm, Nagel et al. (including **Wang**), “TOI-1468: A system of two transiting planets, a super-Earth and a mini-Neptune, on opposite sides of the radius valley,” *A&A* (2022), 666, A155.
13. Persson, Georgieva, Gandolfi et al. (including **Wang**), “TOI-2196 b: Rare planet in the hot Neptune desert transiting a G-type star,” *A&A* (2022), 666, A184.
12. Chontos, Murphy, MacDougall et al. (including **Wang**), “The TESS-Keck Survey: Science Goals and Target Selection,” *AJ* (2022), 163, 297.
11. Christian, Vanderburg, Becker et al. (including **Wang**), “A Possible Alignment Between the Orbits of Planetary Systems and their Visual Binary Companions,” *AJ* (2022), 163, 207.
10. Winters, Cloutier, Medina et al. (including **Wang**), “A Second Planet Transiting LTT 1445A and a Determination of the Masses of Both Worlds,” *AJ* (2022), 163, 168.
9. Silverstein, Schlieder, Barclay et al. (including **Wang**), “The LHS 1678 System: Two Earth-sized Transiting Planets and an Astrometric Companion Orbiting an M Dwarf Near the Convective Boundary at 20 pc,” *AJ* (2022), 163, 151.
8. Grunblatt, Saunders, Sun et al. (including **Wang**), “TESS Giants Transiting Giants. II. The Hottest Jupiters Orbiting Evolved Stars,” *AJ* (2022), 163, 120.

7. Kaye, Vissapragada, Günther et al. (including **Wang**), “Transit timings variations in the three-planet system: TOI-270,” *MNRAS* (2022), 510, 5464.
6. Giacalone, Dressing, Hedges et al. (including **Wang**), “Validation of 13 Hot and Potentially Terrestrial TESS Planets,” *AJ* (2022), 163, 99.
5. Scarsdale, Murphy, Batalha et al. (including **Wang**), “TESS-Keck Survey. V. Twin Sub-Neptunes Transiting the Nearby G Star HD 63935,” *AJ* (2021), 162, 215.
4. Gan, Bedell, Wang et al. (including **Wang**), “HD 183579b: a warm sub-Neptune transiting a solar twin detected by TESS,” *MNRAS* (2021), 507, 2220.
3. Otegi, Bouchy, Helled et al. (including **Wang**), “TESS and HARPS reveal two sub-Neptunes around TOI 1062,” *A&A* (2021), 653, A105.
2. Dong, Huang, Dawson et al. (including **Wang**), “Warm Jupiters in TESS Full-frame Images: A Catalog and Observed Eccentricity Distribution for Year 1,” *ApJS* (2021), 255, 6.
1. Rodriguez, Quinn, Zhou et al. (including **Wang**), “TESS Delivers Five New Hot Giant Planets Orbiting Bright Stars from the Full Frame Images,” *AJ* (2021), 161, 194.

Teaching & Outreach

Observatory Operator , Maryland Space Grant Observatory	<i>2023 – 2026</i>
Learning Den Tutor , JHU	<i>2023</i>
Hopkins Insider Contributor , JHU	<i>2023</i>
Undergraduate Learning Assistant , JHU	<i>2023</i>

Media Features

JHU Hub , “Rising Johns Hopkins senior Gavin Wang wins Astronaut Scholarship”	<i>Jul. 2025</i>
Nature Research Highlights , “Solved: the mystery of the evaporating planet”	<i>Jun. 2025</i>
JHU Newsletter , “Humans of Hopkins: Goldwater Scholar Gavin Wang”	<i>Apr. 2025</i>
JHU Hub , “Four Johns Hopkins students awarded Goldwater Scholarships”	<i>Apr. 2025</i>