

Carlos Jurado

🌐 Academic Website — ✉ carlosjurado@utexas.edu

Education

PhD, Astronomy; The University of Texas at Austin Aug. 2024 – June 2029
BS, Astrophysics; University of California, Los Angeles (UCLA) 2024

Research

Graduate Student Researcher at UT Austin – Austin, TX Sept. 2024 – Present
Advisor: Keith Hawkins

Student Researcher at University of Notre Dame – Notre Dame, IN May 2023 – Aug. 2024
Advisor: Lauren Weiss

Combined radial velocity measurements of Kepler-34 and Kepler-35 from several spectrographs to place a strong mass upper limit on additional stellar and substellar companions in the two systems.

Student Researcher at UCLA – Los Angeles, CA May 2022 – June 2024
Advisor: Smadar Naoz

Utilized supercomputers to create population synthesis models and explore the spatial distribution of stellar remnants at the Galactic Center.

Publications

[1] **Jurado, C.**; Hawkins, K.; Hunt J. A. S.; Hackshaw, Z.; Filion C.; Frankel, N., Carr, C., “Dynamical Origins of Azimuthal Metallicity Variations in the Galactic Disk: Insights from kinematic ridges with Gaia”, *ApJ*, [10.3847/1538-4357/ae346c](https://doi.org/10.3847/1538-4357/ae346c)

[2] **Jurado, C.**; Weiss, L. M.; Daclison L.; Tofflemire, B.M.; Orosz J. A.; Welsh, W. F., “Upper Limits on Stellar Companions to the Kepler-34 and Kepler-35 Systems”, *AJ*, [10.3847/1538-3881/ada5f5](https://doi.org/10.3847/1538-3881/ada5f5)

[3] **Jurado, C.**; Naoz, S.; Lam, C. Y.; Hoang, B.-M., “Natal Kicks from the Galactic Center and Implications on their Environment and the Roman Space Telescope,” *ApJ*, doi.org/10.3847/1538-4357/ad55ee

Conference Presentations

APS Far West Section, San Diego, CA Oct. 7 2023
Contributing Talk: “The implications of Exploding Stars at the Galactic Center”

Seminars & Informal Talks

Stars, Planets, and ISM Seminar, The University of Texas at Austin <i>Talk:</i> “Exploring the Chemo-Kinematic Structure of the Milky Way Disk”	April 8 2026
Smadar Naoz Research Group Meeting, UCLA <i>Talk:</i> “Dynamical Origins Of Azimuthal Metallicity Variations”	Jan. 8 2026
Stars, Planets, and ISM Seminar, The University of Texas at Austin <i>Talk:</i> “The Effects of Natal Kicks in the Galactic Center”	Jan. 29 2025
AstroBash, UCLA Department of Physics and Astronomy	Oct. 18 2023
AstroBash, UCLA Department of Physics and Astronomy	Nov. 7 2022

Teaching

Graduate Teaching Assistant, Search For Extraterrestrial Life (AST 309L)	Aug. 2025 – Dec. 2025
Graduate Teaching Assistant, Introductory Astronomy (AST 301)	Jan. 2025 – May 2025
Undergraduate Course Reader, Introductory Physics (Physics 5A)	Oct. 2023 – Dec. 2023
Undergraduate Course Reader, Introductory Mechanics (Physics 1A)	April 2024 – June 2024
Undergraduate Learning Assistant, Introductory Mechanics (Physics 1A)	Jan. 2023 – Mar. 2023

Awarded Telescope Time

McDonald Observatory <i>PI:</i> Carlos Jurado (11 nights)	Feb. & July 2026
<i>Spectroscopically observe 10 stellar triples using the 2.7m Harlan J Smith Telescope in order to determine the level of chemical homogeneity.</i>	

Observing Experience

2.7m Harlan J. Smith Telescope, McDonald Observatory (17 nights)	Ft Davis, TX
0.8m Telescope, McDonald Observatory (2 nights)	Ft Davis, TX

Service & Outreach

Graduate Student Assembly Representative, The University of Texas at Austin	Aug. 2025 - May 2026
Student Panelist, UCLA AstroLive Summer Workshop	July 19 2022
Volunteer and Student Panelist, UCLA Physics and Astronomy Outreach Event	May 19 2022

Skills

Programming Languages: Python, C/C++

Tools: iSpec, SAPHIRES

Software: BACCHUS, IRAF, SAOImageDS9

Other: Linux/Unix, Git, L^AT_EX