CURRICULUM VITAE
Roberto Alexander Tejada Arevalo

Department of Astrophysical Sciences
Princeton University
4 Ivy Lane
Princeton University, Princeton, NJ 08544
arevalo@princeton.edu
(323) 915-9270

Education:

- Ph.D. in Astrophysical Sciences, Princeton University (Expected Spring 2026).
- B.S. Physics, California State University, Los Angeles (2020), Summa Cum Laude.
- A.A. Physics and Mathematics, Los Angeles City College (2017).

Selected Publications:

Tejada Arevalo, R. *Different Inhomogeneous Evolutionary Histories for Uranus and Neptune.* 2025, ApJL, 989, L40.

Tejada Arevalo, R., Sur, A., Su, Y., Burrows, A. *Jupiter Evolutionary Models Incorporating Stably Stratified Regions.* 2025, ApJ, 979, 243

Sur, A., **Tejada Arevalo, R.,** Burrows, A., Su, Y. *The Evolution of Jupiter and Saturn as a function of the Semi-convective parameter Rρ.* Submitted to ApJL. arXiv:2506.19041.

Sur, A., **Tejada Arevalo, R.,** Su, Y. Burrows, A. *Simultaneous Evolutionary Fits for Jupiter and Saturn Incorporating Fuzzy Cores.* 2025, ApJL, 980, L5

Tejada Arevalo, R., Sur, A., Su, Y., Burrows, A. *Equations of State, Thermodynamics, and Miscibility Curves for Jovian Planet and Giant Exoplanet Evolutionary Models.* 2024 ApJS, 274, 34

Sur, A., **Tejada Arevalo, R.,** Su, Y., Burrows, A., *APPLE: An Evolution Code for Modeling Giant Planets.* 2024, 971, 104.

Chen, Y., Burrows, A., Sur, A., **Tejada Arevalo, R.** *Jupiter Atmospheric Models and Outer Boundary Conditions for Giant Planet Evolutionary Calculations.* 2023, ApJ, 957, 36

Tejada Arevalo, R., Tamayo, D., Cranmer, M. *Do Young Planets Form in Mean Motion Resonance Chains?* 2022, ApJL, 932, L2

Tejada Arevalo, R., Winn, J., Anderson, K. *Further Evidence of Tidal Spin-up For Hot Jupiter Host Stars*. 2021, ApJ, 919, 2.

Awards:

- May 2024: Princeton Astrophysical Sciences Dept. Mentorship/Diversity Award
- March 2022: Ford Foundation Predoctoral Fellowship

References:

- **Adam S. Burrows**
  Professor of Astrophysical Sciences, Princeton University
  burrows@astro.princeton.edu

- **Josh N. Winn**
  Professor of Astrophysical Sciences, Princeton University
  jwinn@princeton.edu
- **Jonathan Fortney**
  Chair and Professor of Astrophysics, University of California, Santa Cruz
  jfortney@ucsc.edu
- **Daniel Tamayo**
  Assistant Professor of Physics, Harvey Mudd College
  dtamayo@hmc.edu
- **Christopher Theissen**
  Assistant Professor, University of California, San Diego
  ctheissen@ucsd.edu

Selected Conference Talks:

- September 2025: Princeton Astrophysical Sciences Bahcall Lunch (Talk)
- July 2025: Other Worlds Laboratory Conference, UC Santa Cruz (Talk)
- June 2025: AAS 246 (Dissertation Talk)
- May 2025: NY Area Exoplanet Meetup (Talk)
- June 2024: Cool Stars 22 (Poster)
- January 2024: 243rd AAS Conference (Poster)
- May 2022: Exoplanets IV Conference (Poster)
- April 2022: Division of Dynamical Astronomy 53rd Conference (Talk)

Mentorship:

- **Astrophysical Sciences Peer-Mentorship Program**
  I led our department's internal peer-mentorship program for two years. I worked with graduate students and Postdocs to pair them in mentorship pairs according to the graduate students' needs. Junior graduate students (years 1 & 2) were paired with Senior graduate students (years 3 and above), and Senior graduate students were paired with Postdocs. The goal was to create mentoring relationships where graduate students checked in regularly with their mentors to discuss their current projects, activities, life as a graduate student, and their future plans with someone more senior than them.
- **Calbridge**
  I am part of Calbridge's alumni committee. Calbridge is a program in California that prepares undergraduate students from disadvantaged backgrounds to apply and succeed in graduate school. We organize panel discussions and workshop events focusing on graduate school applications, research methods, coding skills, and more.