# Quang H. Tran

### $Curriculum\ Vitae$

CONTACT INFORMATION	Department of Astro The University of To 2515 Speedway, Stop	*	quangtran@utexas.edu +1 (404) 641 2624 quanghtran.io
EDUCATION	Ph.D., The University Advisor: Brendan P	ersity of Texas at Austin . Bowler	Expected Spring 2024
	A.B., The Univer		September 2014 – June 2018
	Heyman-Moritz Odyssey Scholar Thesis: <i>The Distance to Sculptor via RR Lyrae Period-Luminosity Rel</i> Advisor: W. L. Freedman		
APPOINTMENTS	The University of		2018 - Present
	Flatiron Institute CCA Pre-Doctoral Fellow NASA FINESST Fellow		2021 – 2022 2020 – Present
	Graduate Student Researcher		2018 - 2020 2018 - 2020
	The University of Chicago Undergraduate Research Assistant		2015 - 2018
RESEARCH INTERESTS	<ul> <li>Understanding the evolution of giant planetary systems architecture and geometry.</li> <li>Characterizing the influence of stellar properties on planetary occurrence rates.</li> <li>Searching for hot and warm Jupiters around young, active stars.</li> <li>Modeling stellar activity signals in astronomical time series.</li> </ul>		
AWARDS AND HONORS	SACNAS Outstanding Student Oral Presentation Award  Flatiron Institute Center for Computational Astrophysics Pre-Doctoral Fellow 2021 Fred T. Goetting, Jr. Memorial Endowed Presidential Scholarship, UT Austin 2021 Outstanding service to the Department of Astronomy, awarded once per year Outstanding Master's Thesis, UT Austin 2021 Outstanding Master's thesis in Mathematics, Engineering, Physical Sciences, or Biological and Life Sciences, awarded once per year to one student ExoExplorers Inaugural Cohort, ExoPAG and NASA 2021 McDonald Observatory B.O.V. Master's Defense Award, UT Austin 2020 Outstanding PhD candidacy exam and defense, awarded once per year Department of Astronomy OGS Summer Award, UT Austin 2020		
AWARDED GRANTS	FI, Future Investigators in NASA Earth and Space Science and Technology (\$135k)  Determining the Evolution and Migration of Young Giant Planets 2020		
SCIENTIFIC PRESENTATIONS	Invited Talk Contributed Talk Invited Talk Invited Talk Invited Talk Invited Talk Contributed Talk Contributed Talk	Pennsylvania State University 2022 SACNAS NDiSTEM Con McDonald Observatory Board University of Montreal Student Yale University Exoplanets and ExoExplorer's Science Series, I Stars, Planets, and the ISM Se ERES IV, Pennsylvania State	of Visitors Meeting July 2022 t Seminar Series June 2022 d Stars Seminar Dec. 2021 NASA March 2021 eminar, UT Austin May 2020

## REFEREED PUBLICATIONS

**DNASA ADS, DORCID iD, & Google Scholar.** 

First-author publications: 4, Total publications: 10. Total first-author citations: 14, Total citations: 49. First-author h-index: 3, Total h-index: 4.

#### First-Author Publications

4. Joint Modeling of Radial Velocities and Photometry with a Gaussian Process Framework

Tran, Q. H.; Bedell, Megan; Foreman-Mackey, Daniel; Luger, Rodrigo; 2023, AJ, 950, 162.

3. Distances to Local Group Galaxies via Population II, Stellar Distance Indicators I: The Sculptor Dwarf Spheroidal

Tran, Q. H.; Hoyt, T. J.; Freedman, W. L.; Madore, B. F.; Oakes, E. K.; Cerny, W.; Hatt, D.; Beaton, R. L; 2022, AJ, 935, 1.

2. TOI-1670 b and c: An Inner Sub-Neptune with an Outer Warm Jupiter Unlikely to Have Originated from High-eccentricity Migration

Tran, Q. H.; Bowler, B. P.; Endl, M.; et al. [41 Total]; 2022, AJ, 163, 225.

1. The Epoch of Giant Planet Migration Planet Search Program. I. Near-Infrared Radial Velocity Jitter of Young Sun-like Stars

Tran, Q. H.; Bowler, B. P.; Cochran, W. D.; Endl, M.; Stefánsson, G.; Mahadevan, S.; Ninan, J. P.; Bender, C. F.; Halverson, S.; Roy, A.; Terrien, R. C.; 2021, AJ, 161, 173.

#### Co-Author Publications

- 6. Giant Tidal Tails of Helium Escaping the Hot Jupiter HAT-P-32 b Zhang, Z.; Morley, C. V.; Gully-Santiago, M.; et al. [17 Total]; Science Advances, accepted.
- 5. Astrometric Accelerations as Dynamical Beacons: A Giant Planet Imaged Inside the Debris Disk of the Young Star AF Lep

Franson, K.; Bowler, B. P.; Zhou, Y.; et al. [16 Total]; ApJL, accepted.

- 4. Rotation Periods, Inclinations, and Obliquities of Cool Stars Hosting Directly Imaged Substellar Companions: SpinOrbit Misalignments Are Common Bowler, B. P.; Tran, Q. H.; Zhang, Z.; et al. [13 Total]; 2023, ApJ, 165, 4.
- 3. Astrometric Accelerations as Dynamical Beacons: Discovery and Characterization of HIP 21152 B, the First T-dwarf Companion in the Hyades Franson, K.; Bowler, B. P.; Bonavita, M.; et al. [31 Total]; 165, 2.
- Distances to Local Group Galaxies via Population II, Stellar Distance Indicators.
   II. The Fornax Dwarf Spheroidal
   Oakes, E. K.; Hoyt, T. J.; Freedman, W. L.; Madore, B. F.; Tran, Q. H.; Cerny, W.; Beaton, R. L.; Seibert, Mark; 2022, ApJ, 929, 116.
- Dynamical Mass of the Young Substellar Companion HD 984 B
   Franson, K.; Bowler, B. P.; Brandt, T. D.; Dupuy, T. J.; Tran, Q. H.; Brandt,
  G. M.; Li, Y.; Kraus, A. L.; 2021, 2022, AJ, 163, 50.

#### PI OBSERVING PROGRAMS

- PI, Habitable Zone Planet Finder (HPF), Hobby-Eberly Telescope: The Epoch of Giant Planet Migration, 422.5 hours (2019-T1-2023-T2)
- PI, NN-EXPLORE Exoplanet Investigations with Doppler Spectroscopy (NEID), WIYN Observatory: Confirmation of Two Hot Jupiters in the AB Dor Young Moving

Group, 2.07 nights (2023A); 1.72 nights (2023B)

PI, M dwarf Advanced Radial velocity Observer Of Neighboring eXoplanets (MAROON-X), Gemini-North Telescope: Confirmation of Two Hot Jupiters in the AB Dor Young Moving Group, 12.8 hours (2023B)

PI, 3.5m NASA Exoplanet Star (and) Speckle Imager (NESSI), WIYN Observatory: Establishing the Evolution and Migration of Giant Planets, 1.5 nights (2022B)

PI, 2.7m Robert G. Tull Coudé Spectrograph, McDonald Observatory: *Evolution and Migration of Hot Jupiters*, 15 nights (2019-T1–2020-T3)

## SERVICE AND OUTREACH

Referee for AAS Journals (AJ)	2022 - Present
TAURUS Scholars Graduate Student Mentor and Co-Lead	2019 - 2023
UT Austin Astronomy Graduate Student Mentor and Co-Lead	2018 - 2023
UT Austin Astronomy on Tap, Member and Co-Host	2019 - 2020
UT College of Natural Sciences First Generation FIG Mentor	2019 - 2020