

Know Thy Star, Know Thy Planet 2

02 – 07 Feb 2026, Pasadena, CA

ExoPAG Summary
03 January 2026



Caltech



Acting Executive Director
NASA Exoplanet Science Institute at Caltech/IPAC



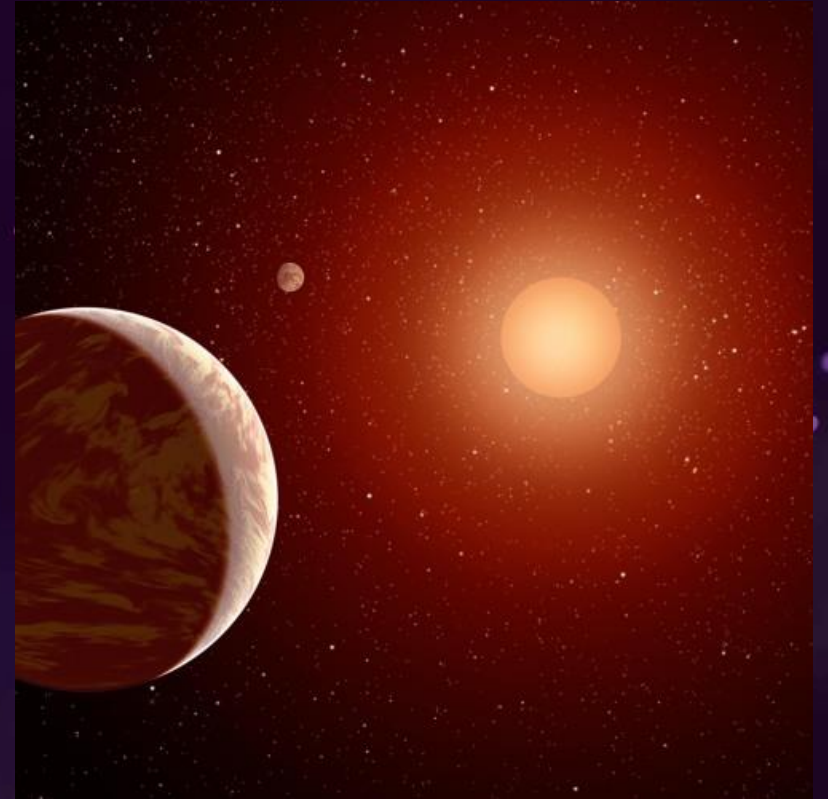
<https://conference.ipac.caltech.edu/knowthystar2/>

KTSKTP2 Motivation

<https://nexsci.caltech.edu/conferences/2017/knowthystar/>

2017 meeting

- One of the first exoplanet meetings organized around the stars and not the planets
- Concentrated on exoplanet discovery but since that meeting the community has developed new techniques and has moved more strongly and more broadly into characterization



KTSKTP2 Motivation

2017 meeting

... and we promised ...



Stay tuned for....

Revenge of Know Thy Star, Avenge Thy Planet

LOC and SOC

Local Organizing Committee

Frank Aragon

Wendy Burt

Mari Castillo

Catherine Clark

Sean Kindt

Eric Oh

The IPAC Staff

The Caltech Staff

Science Organizing Committee

Heather Cegla co-chair

David Ciardi co-chair

Nestor Espinoza

Heather Knutson

Eric Mamajek

Annelies Mortier

Impact of the Southern California Fires

- Hundreds of our colleagues and thousands in our community were affected by the fires
- It has been a year since the fires and so many people are still displaced and businesses still struggling to return



FUND PROFILE

Eaton Fire Relief & Recovery Fund

In 2025, through the Eaton Fire Relief & Recovery Fund, Pasadena Community Foundation together with its supporting organization the Altadena Builds Back Foundation has delivered more than \$20 million to accelerate recovery across our devastated community. PCF remains at the forefront of fire relief, championing Altadena's long-term housing recovery and directing resources to community-based nonprofit agencies in support of families and individuals in Altadena, Pasadena, and Sierra Madre directly impacted by the Eaton Fire.

[Donate to this fund](#)

[Eaton Fire Relief & Recovery Grants](#)

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[#knowthystar2](#)

235 (200 in-person) attendees



General Observations about KTSKTP2

2017: dominated by Kepler and $\sim 1\text{-}5$ m/s RV

- Before Kepler and After Kepler

2025: dominated by Kepler, TESS, $\sim <1$ m/s RV, Gaia, JWST

- Before JWST and After JWST
- Before Gaia and After Gaia

“Pre-Gaia times were rough!” – *Zafar Rustamkulov*

General Observations about KTSKTP2

2017 was all about discovery ... 2025 was all about characterization

“Know thy star, know thy planet, know thy system, know thy formation, know thy demographics”

• - *Dan Huber*

Agenda: Talks grouped by topics

Stellar Properties of Exoplanet Host Stars

Stellar Activity and Variability

Sun as a Star

Trends in Stellar and Exoplanetary Systems Architectures and Demographics

Influence of Stellar Properties on Inferred Planet Properties

Determining Planet Masses in the presence of stellar activity

Observations of Exoplanet Atmospheres in the presence of stellar activity

Physical Impacts of Stellar Evolution and Activity on Exoplanets

Future Directions and Missions

Agenda: Talks and Videos Online

Agenda

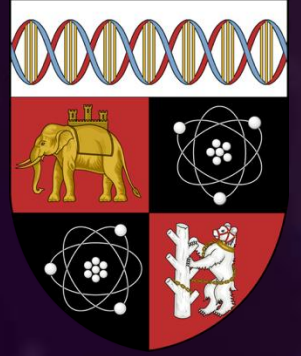
The collection of video recordings for the talks can be found on the [Caltech / IPAC YouTube Channel](#). Each of the talks in the agenda is linked to a pdf of the presentation and the video recording of the speaker where available.

Monday 2025 February 03				
Time				
08:00-09:00	Registration Check-In			
08:45-09:00	PDF	Video	David Ciardi (NExSci-Caltech/IPAC)	Welcoming Remarks
Stellar Properties of Exoplanet Host stars I				
09:00-09:15	PDF	Video	Dan Huber (U. of Hawaii)	How Well Do We Really Know Our Stars?
09:15-09:30				
09:30-09:45	PDF	Video	Zafar Rustamkulov (JHU)	The Transit Age: Precise Main Sequence Planet Host Ages in the Era of Gaia and JWST
09:45-10:00	PDF	Video	Luke Bouma (Caltech)	Ages For Exoplanet Host Stars: Rotation & Lithium in the Kepler Field
10:00-10:15	PDF	Video	Tim Bedding (U Sydney)	Should We Trust Asteroseismic Scaling Relations?
10:15-10:30	PDF	Video	Isabel Angelo (UCLA)	Searching for Unresolved Binaries Among Kepler's Planet Hosts



<https://conference.ipac.caltech.edu/knowthystar2/page/agenda>

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2017 → 2025 → 2028

University of Warwick (Chair: Heather Cegla)

