

Welcome to Know Thy Star, Know Thy Planet 2

#knowthystar2



03 – 07 February 2025



Caltech

David R. Ciardi
Deputy Director
NASA Exoplanet Science Institute at Caltech/IPAC

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

IPAC on the Caltech Campus



Caltech/IPAC advances the exploration of our Universe through science operations, data archiving, and community support

- IPAC is a science center that supports NASA, NSF, private, and international astrophysics projects
- **NASA Exoplanet Science Institute**
- Mission and science operations, data archives
 - TESS, NEID, Keck, Euclid, ZTF, SPHEREx, LTB, Rubin, Roman, LTB, NEOSurveyor, UVEx, DSA-200, Ariel
 - IRSA, NED, Exoplanet Archive, ExoFOP



Impact of the Southern California Fires

- Hundreds of our colleagues and thousands in our community were affected by the fires
- We communicated with the community in deciding whether to hold the conference
- Thank you for coming and supporting our colleagues and the local community



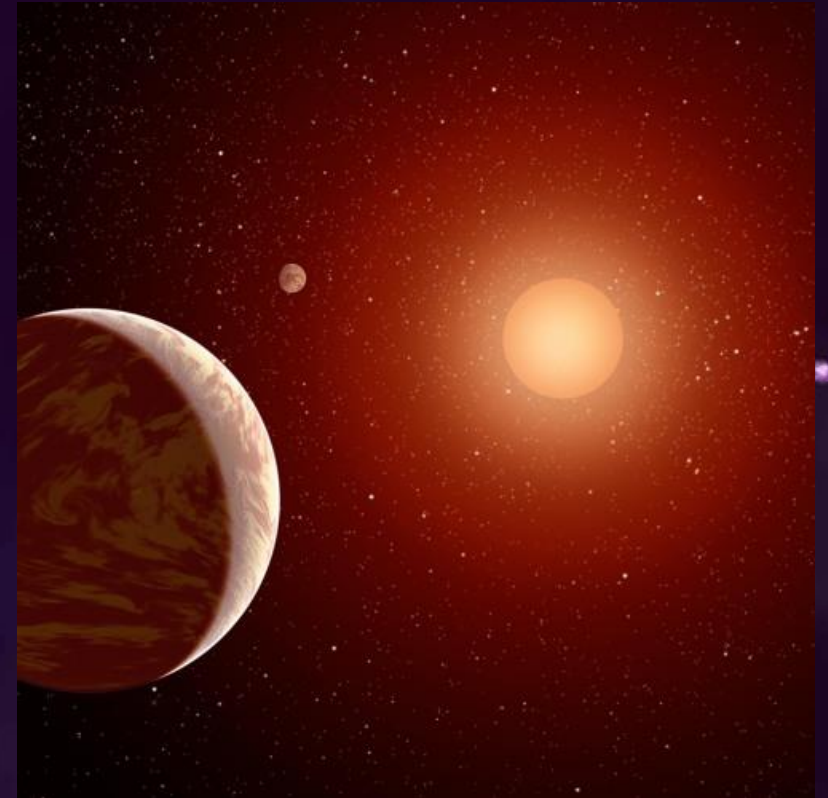
#knowthystar2

KTSKTP2 Motivation

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

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



KTSKTP2 Motivation

2017 meeting

... and we promised ...



Stay tuned for....

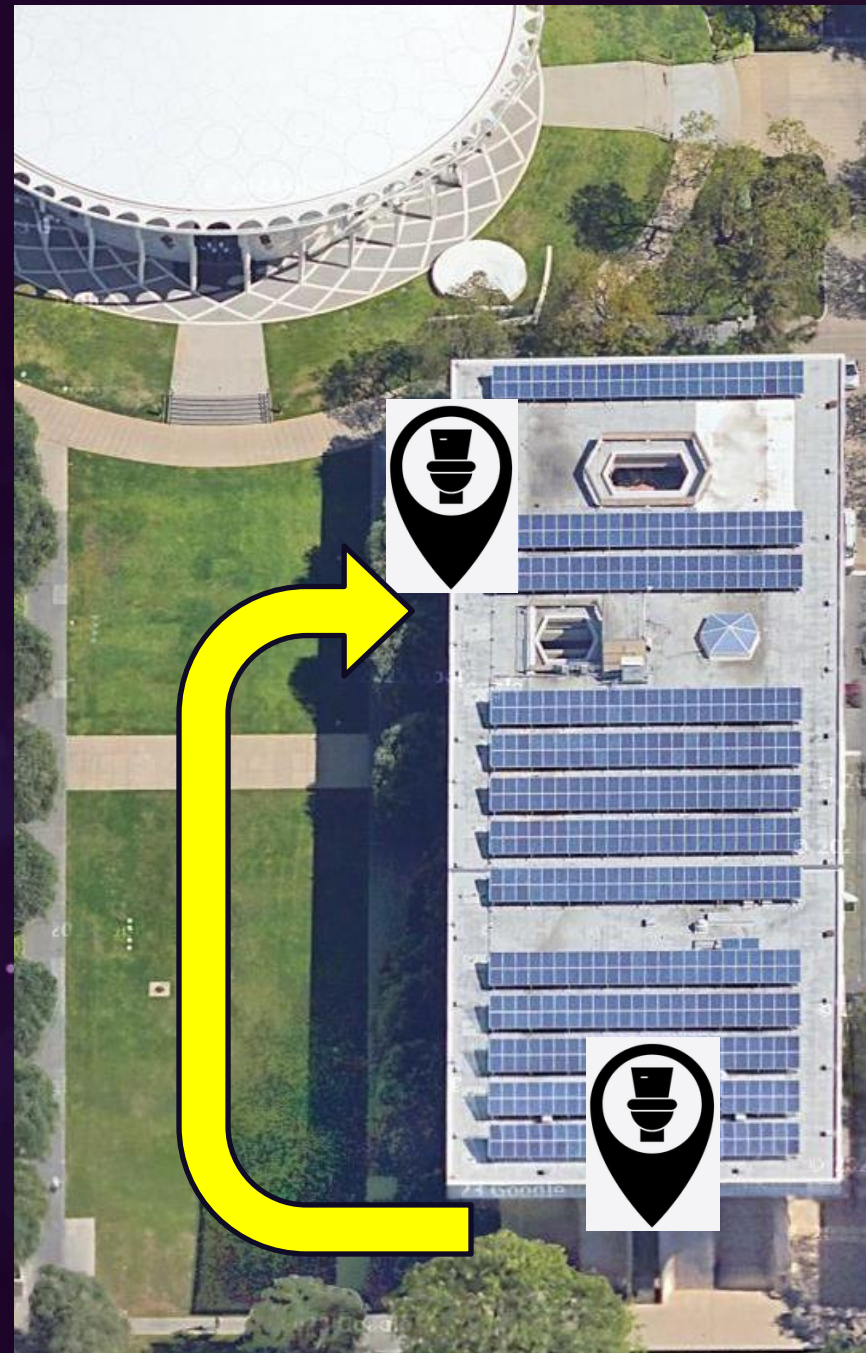
Revenge of Know Thy Star, Avenge Thy Planet

Code of Conduct

- As a reminder, everyone has agreed to the conference code of conduct
- If there are any concerns, please contact us through one of these means
 - Me
 - Catherine Clark
 - Heather Cegla
 - knowthystar2@ipac.caltech.edu

Restrooms

- Through lobby upstairs on second floor
- OR*
- Entrance on West side of this building (no stairs)
- Also, restrooms at poster hall



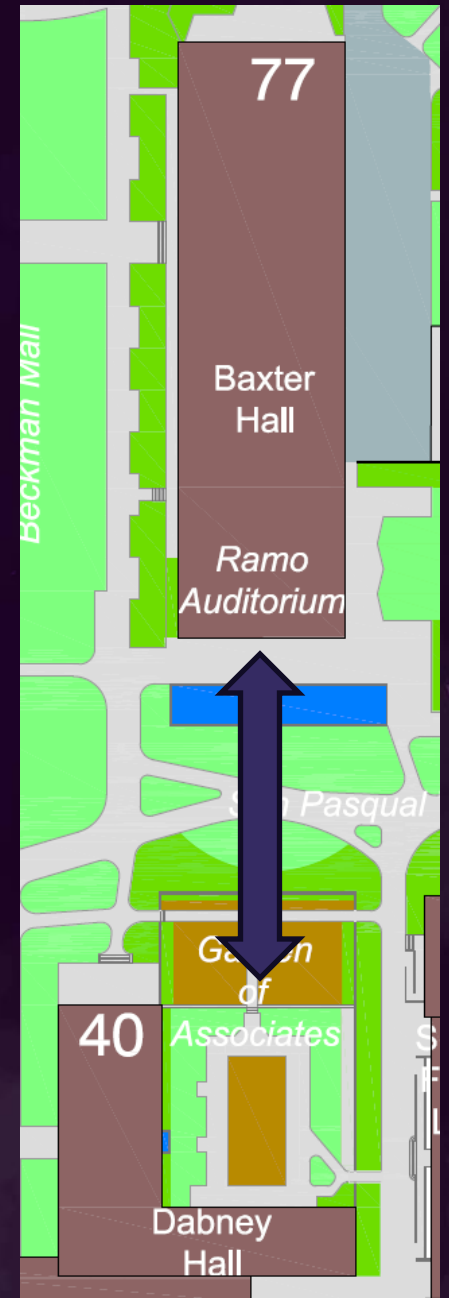
Speaker Instructions

- Talks are being shared online through zoom and recorded unless asked otherwise
- Online questions through Zoom not slack
- Podium microphone
 - Stay at the podium
- Lapel microphone
 - Stay within the tape
- **30 min = 25 min + 5 min**
- **15 min = 12 min + 3 min**



Posters and Coffee Breaks

- 30-minute coffee breaks at the poster area Dabney Hall
- Posters assigned numbers and up all week
- Dedicated poster session Wednesday afternoon
- Please respect the bell so we can keep the conference on track



Wireless

- Eduroam or Caltech Visitor Network
- Network Name: 'Caltech Visitor'
 - Username: KnowThyStar
 - Password: 2025_KTSKTP2
 - Once connected, open a web browser and go to www.caltech.edu.
 - You will be redirected to an Authentication page where you can enter the above credentials.



HWO25 | JULY 28 – 31, 2025

Towards the

H A B I T A B L E W O R L D S O B S E R V A T O R Y

VISIONARY SCIENCE AND TRANSFORMATIONAL TECHNOLOGY

JOHNS HOPKINS BLOOMBERG CENTER, WASHINGTON DC

ABSTRACTS DUE MONDAY, FEBRUARY 10

PRELIMINARY PROGRAM
ANNOUNCED MARCH-APRIL



#knowthystar2

Sagan Summer Workshop: 2025 July 21-25

Silver Jubilee – Exoplanet Demographics

How techniques from RV and transits to imaging, astrometry, and microlensing contribute to our understanding of the exoplanet demographics

- Fully hybrid (~200 in person, many more online)
- Hands-on data and software exercises
- Attendee posters and pops
- In-person and virtual lunches with the speakers
- Registration opens February 3rd (Today!!!)
- Travel support requests due by March 20th

<https://nexsci.caltech.edu/workshop/2025/>



	Sunday Feb 2	Monday Feb 3	Tuesday Feb 4	Wednesday Feb 5	Thursday Feb 6	Friday Feb 7
Time						
08:00-09:00		Registration Check-In				
08:45-09:00		Opening Remarks	Opening Remarks	Opening Remarks	Opening Remarks	Opening Remarks
		Morning Themes 900-1230				
		Stellar Properties of Exoplanet Host stars I	Trends in Stellar and Exoplanetary Systems Architectures and Demographics I	Influence of Stellar Properties on Inferred Planet Properties	Observations of Exoplanet Atmospheres in the presence of stellar activity	Physical Impacts of Stellar Evolution and Activity on Exoplanets
09:00-09:15		Dan Huber (UHawaii)	Jessie Christiansen (NExScI-Caltech/IPAC)	Elisabeth Newton (Dartmouth)	Ben Rackham (MIT)	Jessica Spake (Carnegie)
09:15-09:30		Zafar Rustamkulov (JHU)	Songhu Wang (Indiana)	Jeff Valenti (STScI)	Arianna Saba (UCL)	Ethan Schreyer (UCSC)
09:30-09:45		Luke Bouma (Caltech)	Laura Rogers (NOIRLab)	Nathanael Allen Burns-Watson (UT Austin)	Annabella Meech (CfA Harvard SAO)	Raissa Estrela (JPL)
09:45-10:00		Tim Bedding (U Sydney)	Greg Gilbert (UCLA)	Galen Bergsten (UArizona)	Catriona Anne Murray (Colorado)	Morgan Sidel (Caltech)
10:00-10:15		Isabel Angelo (UCLA)	Gudmundur Stefansson (U Amsterdam)	Kevin Schlaufman (JHU)	Natalie Allen (JHU)	Lori Huseby (UA)
10:15-10:30		30 min Break	30 min Break	30 min Break	30 min Break	30 min Break
10:30-11:00		Jamie Tayar (UFlorida)	Eve Lee (UCSD)	James Davenport (UWashington)	Luis Welbanks (ASU)	James Rogers (Cambridge, UK)
11:00-11:15	Free	Angharad Weeks (UCL)	Stephen Schmidt (JHU)	Mike Greklek-McKeon (Caltech)	Michael Radica (UChicago)	Aidan Gibbs (UCLA)
11:15-11:30		Aida Behmard (CCA)	Samuel Yee (CfA Harvard SAO)	Rob Kavanagh (ASTRONU Amsterdam)	Daniel Krolikowski (UA)	Kevin France (Colorado)
11:30-11:45		Travis Metcalfe (WDRRC)	Harshitha M Parashivamurthy (University of Chile)	Caroline Piaulet-Ghorayeb (U Chicago)	Gloria Canocchi (Stockholm)	Sarah Rugheimer (York U)
11:45-12:00		Jack Lubin (UC Irvine)	Anne Dattilo (UCSC)	Elise Koo (U Amsterdam)	Ward Howard (Colorado)	Thea Faridani (UCLA)
12:00-12:15		Lunch	Lunch	Lunch	Lunch	Lunch
12:15-12:30						
12:30-14:00						
		Afternoon Themes 1400-1730				
		Stellar Activity and Variability I	Stellar Properties II and Stellar Activity II	Determining Planet Masses in the presence of stellar activity	Trends in Stellar and Exoplanetary Systems Architectures and Demographics II	Future Directions and Missions
14:00-14:15		Rachael Roettenbacher (U. Michigan)	David Wilson (Colorado)	BJ Fulton (IPAC-Caltech)	Adam Kraus (UT Austin)	Alessandro Sozetti (Gaia-DR4)
14:15-14:30		Robert Oliver Parke Loyd (Eureka)	Aneesh Baburaj (UCSD)	Alejandro Suárez Mascareño (IAC)	Sarah Blunt (UCSC)	Knicole Colon (Pandora)
14:30-14:45		Jessica Libby-Roberts (PSU)	Federica Rescigno (U Birmingham)	Kyle Franson (UTAustin)	Shishir Dholakia (USQ)	Davy Kirkpatrick (SPHEREx)
14:45-15:00		Michael Palumbo (Flatiron)	Arvind Gupta (NOIRLab)	Zoe Luca de Beurs (MIT)	Rob Zellem (Roman)	Rob Zellem (Roman)
15:00-15:15		Sara Seager (MIT)	Prajwal Niraula (EAPS, MIT)	Melissa Janice Hobson (Obs. de Geneve)	Noah Vowell (MSU)	Annelies Mortier (Plato)
15:15-15:30		30 min Break		Megan Bedell (Flatiron)	Vincent Savignac (UCSD)	Peter Plavchan (Landolt)
15:30-16:00	Registration Check-In				30 min Break	Mark Swain (JPL)
16:00-16:15		Sun as a Star				Joshua Pepper (HWO)
16:15-16:30		Bill Chaplin (U Birmingham)	Free Time for Networking		Malena Rice (Yale)	Closing Remarks
16:30-16:45	Evening Reception	Marcelo Emilio (U. Estadual de Ponta Grossa)		Know Thy Posters	Lou Baya Ould Rouis (BU)	
16:45-17:00		Niamh O'Sullivan (U Oxford)			Rayna Rampalli (Dartmouth)	End of Conference
17:00-17:15		Elizabeth Gonzalez (PSU)			John Jacob Zanazzi (UC Berkeley)	
17:15-17:30		Sara Tavella (U Geneva)			Xianyu Wang (Indiana)	
			19:00 - 21:00			
			Conference Dinner at the Caltech Athenaeum			