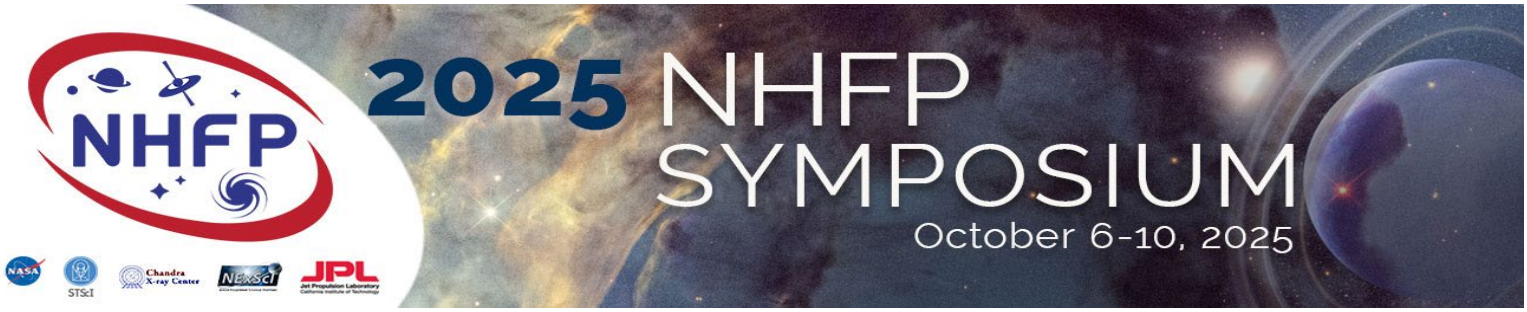

Monday, October 6, 2025

Time	Title	Speaker	Location
9:00-9:50	Breakfast **Speaker Tech Check for Session 1**		Café
10:00-10:30	Welcome	NHFP Leads Nancy Levenson, Deputy Director, STScI Peg Luce, NASA HQ Jennifer Wiseman, NASA GSFC	
Session 1: Fast Radio Bursts Chair: Wynn Jacobson-Galán			
10:30	Uncovering the Origins of Fast Radio Bursts Through Their Local Environments	Kenzie Nimmo	Auditorium
10:45	Fast Radio Bursts and Beyond: Time-Domain and Multi-Messenger Astronomy with CHIME/FRB Outriggers	Aaron Pearlman	
11:00-11:30	Coffee Break **Speaker Tech Check**		Café
11:30-1:00	**Science Policy Panel** Moderator: Sarah Moran	Ashlee Wilkins House Science, Space & Tech Committee Daniel Nagasawa Space Studies Board (National Academies) Anjali Tripathi JPL, formerly of Office of Science & Tech Policy Jean Toal Eisen AURA	Auditorium
1:00-2:00	Lunch Break **Speaker Tech Check for Sessions 2 & 3**		Café
Session 2: Magnetic Interstellar and Intercluster Media Chair: Wynn Jacobson-Galán			
2:00	Magnetic Fields & Phase Structure in the Neutral ISM: Insights from High-Resolution Simulations	Iryna Butsky	Auditorium
2:15	Probing Interstellar Cloud Properties Through Turbulent Dynamics	Raphael Skalidis	
2:30	3D Magnetic Fields in the ICM	Yue Hu	

Session 3: Probes of the Young Universe Chair: Hayley Macpherson			
2:45	Multi-Wavelength Cosmology at Cosmic Dawn	⭐ Nicholas Kern	Auditorium
3:00	Latest results from the DESI: Challenges to the ΛCDM Model	Cristhian Garcia Quintero	
3:15	Cosmology with Line Intensity Mapping	Jessica Zebrowski	
3:30-4:00	Coffee Break **Speaker Tech Check for Session 4**		Café
Session 4: Techniques for Exoplanet Searches Chair: Maggie Thompson			
4:00	Astrometric Accelerations as Dynamical Beacons: Imaging Planets Around Young Accelerating Stars	⭐ Kyle Franson	Auditorium
4:15	Probing the Free-Floating Planet Population with Gravitational Microlensing	⭐ Keming Zhang	
4:30	Stellar Signals in Spectra are Compact	Lily Zhao	
4:45	Connecting Polarization Aberrations to Exoplanet Yields for the Habitable Worlds Observatory	Jaren Ashcraft	

⭐ = Virtual Presentation

Tuesday, October 7, 2025

Time	Title	Speaker	Location
9:00-9:50	Breakfast **Speaker Tech Check for Session 5**		Café
Session 5: Dark Energy and the Hubble Constant Chair: Hayley Macpherson			
10:00	SN H0pe: The First Measurement of H0 from a Multiply Imaged Type Ia Supernova	Massimo Pascale	Auditorium
10:15	Measuring the Hubble Constant with the First Sibling Pair of Multiply-Imaged Supernovae	Justin Pierel	
10:30	Mapping Cosmic Expansion History with DESI	Andrei Cuceu	
10:45	Peculiar Velocities in the Effective Theory of Large Scale Structure	Shi-Fan Chen	
11:00-11:15	Group Photo		Front Entrance, STScI
11:15-12:00	Coffee Break **Speaker Tech Check**		Café
12:00-1:00	**Fellows Only: Q&A Session with the STScI Grants Office Chair: NHFP Lead**	STScI Grants Administration	Auditorium
1:00-2:00	Lunch Break **Speaker Tech Check for Session 6**		Café
Session 6: Characterizing Planetary and Substellar Worlds Chair: Shangjia Zhang			
2:00	Planetary Evolution: A Photochemical Perspective	⭐Danica Adams	Auditorium
2:15	Water Solubility and the Interior-Atmosphere Connection of Low-Mass Exoplanets	Maggie Thompson	
2:30	Surface characterization of the Rocky Exoplanet LHS 3844b with MIRI/LRS and NIRSpec/G395H on JWST	Sebastian Zieba	
2:45	A Glimpse into the Water Inventory of Rocky Planets Using Host Star Abundances	Kiersten Boley	
3:00	Atmospheric Retrievals of Intermediate-Mass Early-L Brown Dwarfs in the AB Doradus Moving Group	Caprice Phillips	
3:15	Aggregate Cloud Particles in Substellar Atmospheres	Sarah Moran	
3:30-4:00	Coffee Break **Speaker Tech Check for Session 7**		Café

Session 7: Galaxy Evolution Chair: Abby Lee			
4:00	The Gates of Cibola: Revealing the Stellar Populations of the Starburst Galaxy, M82 with JWST	Adam Smercina	Auditorium
4:15	Hot Circumgalactic Medium in mm and X-ray Observations	Sanskriti Das	
4:30	A Multiwavelength View of the Evolving Baryon Cycle in Galaxy Clusters	Michael Calzadilla	
4:45	Mock Observations of Circumgalactic Medium Turbulence	Cassandra Lochhaas	
5:00	Mapping the Dark Matter Distribution of the Milky Way in the Era of All-Sky Surveys	Nico Garavito Camargo	
6:00 – 8:30	Symposium Dinner		Café

⭐ = Virtual Presentation

Wednesday, October 8, 2025

Time	Title	Speaker	Location
9:00-9:50	Breakfast **Speaker Tech Check for Session 8**		Café
Session 8: Binary Stellar Evolution and Populations Chair: Alexander Dittmann			
10:00	Discovering the Hidden Population of Quiescent Black Holes	Dominick Rowan	Auditorium
10:15	Finding the Unusual Red Giant Remnants of Cataclysmic Variable Mergers	Nicholas Rui	
10:30	The Anthropology of Merging Stars: Evolution and Impact of Stellar Mergers with Time-domain Surveys	Viraj Karambelkar	
10:45	Pulsar Rockets & Gaia Neutron Star Binaries	Vishal Baibhav	
11:00-11:30	Coffee Break **Speaker Tech Check for Session 9**		Café
Session 9: General Relativity Chair: Alexander Dittmann			
11:30	Einstein's Universe: Tales in General Relativistic Cosmological Simulations	Hayley Macpherson	Auditorium
11:45	Leveraging Binary Black Hole Ringdown Excitations as Probes of Astrophysics and Tests of General Relativity	Keefe Mitman	
12:00-1:00	**Fellows Only: Professional Development Seminar**	⭐ Nancy Houfek	
1:00	**Free Afternoon/Lunch On Own Fellows Only: Optional SOC-Organized Activities**		

⭐ = Virtual Presentation

Thursday, October 9, 2025

Time	Title	Speaker	Location
9:00-9:50	Breakfast **Speaker Tech Check for Session 10**		Café
Session 10: Supernovae and Tidal Disruption Events Chair: Alexander Dittmann			
10:00	A Panchromatic View of Shock Power in Type II Supernovae	Wynn Jacobson-Galán	Auditorium
10:15	The Most Nearby Supernova Following an Einstein Probe Fast X-ray Transient	Jillian Rastinejad	
10:30	Exploding White Dwarfs in a New Light with JWST	Lindsey Kwok	
10:45	Extreme Nuclear Transients: A Window Into the Most Massive Quiescent Black Holes	Jason Hinkle	
11:00-11:30	Coffee Break **Speaker Tech Check for Session 11**		Café
Session 11: Tracers of Accreting Compact Objects Chair: Nicholas Rui			
11:30	XRISM Observations of the X-ray Pulsar Hercules X-1	Peter Kosec	Auditorium
11:45	White Dwarfs as Probes of Convective Overshoot and Evolved Exoplanetary Systems	Tim Cunningham	
12:00-1:30	**Early Career Panel** Moderator: Justin Pierel	Kristy McQuinn STScI Dan D'Orazio STScI Marc Kamionkowski JHU	
1:30-2:30	Lunch Break **Speaker Tech Check for Session 12**		Café
Session 12: Protoplanetary Disks Chair: Sarah Moran			
2:30	Tracing Planet Formation: Chemical Signatures of a Circumplanetary Disc in HD 163296	Andres Izquierdo	Auditorium
2:45	The Giant Planet Formation Time Window: An Observational Perspective	Cheng Han Hsieh	
3:00	Witnessing Giant Planet Formation in the Act: the Sharpest View of the Largest Protoplanetary Disk	Charles Law	
3:15	Shadow-Induced Warps in Protoplanetary Disks	Shangjia Zhang	
3:30-4:00	Coffee Break **Speaker Tech Check for Session 13**		Café

Session 13: Dust Dynamics and Extinction Chair: Adam Smercina			
4:00	Probing Dust Physics in Star-Forming Clouds with STARFORGE	Nadine Soliman	Auditorium
4:15	Exotic Dust at Early Cosmic Times	Jed McKinney	
4:30	The Panchromatic Hubble Andromeda Treasury: Triangulum Extended Region (PHATTER): A High-Resolution Dust Extinction Map and Characterisation of M33	Thavisha Dharmawardena	
4:45	Correlations Between Extinctions Features Across Wavelength Scales: Realizing DIBs as Chemical Tracers	Andrew Saydjari	
8:30-10:30	**Fellows Only:** **Open Mic Night**		Auditorium

Friday, October 10, 2025

Time	Title	Speaker	Location
9:00-9:50	Breakfast **Speaker Tech Check for Session 14**		Café
Session 14: Star Formation and Chemical Evolution Chair: Raphael Skalidis			
10:00	Measuring Star Formation Histories from Asymptotic Giant Branch Stars	Abigail Lee	Auditorium
10:15	Batteries Not Included: Lithium's Insight into Globular Cluster Formation and Stellar Evolution	Madeleine McKenzie	
10:30	Chemical Fingerprints of Massive Galaxy Formation in the JWST Era	Aliza Beverage	
10:45	Untangling the Sources of Abundance Dispersion in the Milky Way	Emily Griffith	
11:00-11:30	Coffee Break **Speaker Tech Check for Sessions 15 & 16**		Café
Session 15: Black Holes and Active Galactic Nuclei Chair: Keefe Mitman			
11:30	Probing the Inner Regions of Black Hole Accretion Disks	Amelia (Lia) Hankla	Auditorium
11:45	Repeated X-ray Flares as Probes for Galactic Nuclei Stellar Dynamics	Riccardo Arcodia	
12:00	Eccentric Supermassive Black Hole Binaries	Alexander Dittmann	
12:15	Little Red Dots: Surprises from JWST at the Dawn of Time	Bingjie Wang	
12:30 – 1:30	Lunch Break		Café