

HST Special Session: January 2020

Maximizing the Science from Two Great Observatories

Description: The Hubble Space Telescope's observing opportunities from the ultraviolet through the infrared have allowed unparalleled discoveries of the universe, from near to far. The pending launch of the James Webb Space Telescope and overlap in science operations of these two observatories enables new science not possible with either observatory separately. While JWST will eclipse HST's performance at near-infrared wavelengths and supplement with longer-wavelength capabilities, Hubble's imaging, spectroscopic, polarimetric, and coronagraphic options at UV and optical wavelengths will continue to provide unique pathways to science. Since Hubble's 24th observing cycle, nearly 2900 orbits of HST time have been used for programs that prepare for future JWST observations. In order to maximize the science that can be done with both observatories once operational, a joint HST-JWST program will be in place starting with JWST Cycle 1 and HST Cycle 29. This special session will discuss recent results in five broad science areas that have utilized observations with Hubble, and describe how the two observatories can work with each other to answer pressing scientific questions. The talks will be followed by a panel discussion to explore additional synergies between the missions.

Author	Title
Molly Peeples, STScI	Overview of Joint HST/JWST Science Policy Synergies
Nikole Lewis, Cornell	Transiting Exoplanet Science in the Era of HST and JWST
Nitya Kallivayalil, U. Virginia	Proper Motion Studies of Stellar Populations in the Local Group and Beyond
Joel Green, STScI	Cameras a Million Miles Apart: Stereoscopic Imaging Potential with the Hubble and James Webb Space Telescopes
Steven Finkelstein, U. of Texas Austin	Observations of the Early Universe with HST and JWST
Janice Lee, CalTech	Connecting Gas and Stars in the Local Universe