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NASA Goddard Space Flight Center

**Title:** Exploring Exoplanets in the Era of JWST and Beyond

**Abstract:** We are in an extraordinary era of exoplanet science. This is thanks in great part to the number of current and upcoming space facilities that are designed to enable the discovery of exoplanet systems or provide detailed characterization of exoplanets and their host stars across a range of ultraviolet to infrared wavelengths. In particular, the James Webb Space Telescope (JWST), which successfully launched in late 2021, is the premier space-based facility for near- and mid-infrared astronomy over 0.6-28.5 microns. JWST is already providing unprecedented sensitivity enabling detailed studies of both transiting and directly-imaged exoplanets. In this talk, I will first present the latest status of JWST that includes early exoplanet results obtained in its first few months of science operations. I will then provide a look ahead at one of the next exciting exoplanet observatories that is planned to launch in the next few years, a new SmallSat mission called Pandora that is being led out of NASA's Goddard Space Flight Center and that is designed to study the impact of star spots on the spectra of exoplanet atmospheres. Together, observatories like JWST and Pandora are poised to re-write exoplanet textbooks for years to come.