Exploring Extrasolar Planetary Systems: New observations of extrasolar planets enabled by the James Webb Space Telescope

The search for extrasolar planets has been increasingly successful over the last few years. In excess of 700 systems are now known, and Kepler has ~2500 additional candidate systems, yet to be confirmed. Recently, progress has also been made in directly imaging extrasolar planets, both from the ground and in space. In this presentation, we will discuss the techniques employed to discover planetary systems, and highlight the capabilities, enabled by the James Webb Space Telescope (JWST). JWST is a large 6.5 meter aperture infrared telescope that is scheduled for launch in 2018, and will allow us to transition to characterizing the properties of these extrasolar planets and the planetary systems in which they reside.