Sasha Hinkley California Institute of Technology The New Era of Exoplanet Direct Imaging

I will describe our ongoing Northern Hemisphere exoplanet direct imaging platform called Project 1640 located at Palomar Observatory. The primary scientific thrust is to obtain images and low-resolution spectroscopy of brown dwarfs and young exoplanets of several Jupiter masses in the vicinity of young stars within 50pc of the sun. I will highlight several recent science results coming from the project. This system is the first of a new generation of dedicated coronagraphic, multi-spectral imagers coupled to adaptive optics (GPI,SPHERE), and we anticipate this instrument will make a lasting contribution to exoplanet direct imaging in the Northern Hemisphere for years.