

Name: David Ciardi"  
Email: ciardi@ipac.caltech.edu"  
Institution: Caltech"  
Title: KOI 2626: A Quadruple System With a PlanetA"  
Type: Rquvgt"  
Session: Earth Analogues and Super-Earths"  
Abstract: KOI 2626, first identified by Batalha et al. 2013, is a single planet candidate system around a relative faint star (Kepmag = 15.9 mag). Initially, the star was assumed to be a single with a temperature of 3900K and a stellar radius of 0.5 R<sub>sun</sub>. With a measured transit depth of 0.8 mmag and an orbital period of 38 days, the planet radius was derived to be 1.4 R<sub>earth</sub> with an equilibrium temperature of 290K. However, high resolution imaging with the Keck Observatory adaptive optics NIRC2 system and our optical speckle camera observations on Gemini-North reveal KOI 2626 as a quadruple system, with 4 stars within 0.2" of each other. A reanalysis of the system with a re-derivation of the stellar and planetary properties is presented, showing that KOI 2626.01 is likely a planet and perhaps the first Kepler planet to be found in a quadruple star system."