

## High Resolution Imaging of Kepler Stars

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Tuesday

October 14

12:30 P.M.

Rm 184 NSH

The Kepler Mission, launched in 2009, has produced a catalog of over 4200 planets in more than 3200 stellar systems. Light curve production and transit detection are just the first steps in the production of the planetary candidates. In addition to the confirmation of the planetary candidates, follow-up observations are crucial to the understanding of the stellar hosts and the planetary systems; spectroscopy and high resolution imaging provide information on the stellar properties and the companion rates of the stars. Based on our years of NIR adaptive optics imaging and speckle imaging, this talk will summarize what we have learned about exoplanet host stars in terms of the binary fraction of exoplanet host stars, and how we can observationally validate Earth-sized exoplanets. Finally, a summary of these new results and their impact on our understanding of exoplanets, in particular their radius and their location in the habitable zone, will be discussed.