

Revealing Exoplanets through High-Contrast Imaging



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The past two decades have seen major advances in our understanding of the formation of planetary systems beyond our own solar system. Evaluating planetary systems with direct imaging provides us new insight into these systems. In the past few years, multiple instruments have come online dedicated to addressing the technical challenges of directly observing the light being emitted from these planets and capable of achieving the high contrast imaging necessary to observe these systems in the infrared. I will discuss the construction, first light and commissioning of the Gemini Planet Imager for the Gemini Observatory and the Coronagraphic High Angular Resolution Imaging Spectrograph for Subaru. Further, I will detail our work characterizing the young Jovian planet beta Pictoris b. I will describe the Gemini Planet Imager Exoplanet Survey, and the future work of surveys with these instruments as well as discuss the next generation of high-contrast imager focused on the direct detection of extrasolar planets.

Wednesday

February 15

4:00 P.M.

Rm 118 NSH

Refreshments
in Rm 202 NSH
@ 3:30 pm