

DIRECT IMAGING DETECTION OF EXTRASOLAR PLANETS

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(Refreshments at 3:30 P.M. NSH 202)

Ground-based high-contrast imaging observations have recently revealed the presence of gas giant planets orbiting at wide separations around nearby stars. In the near future, forth-coming instruments that employ "extreme" adaptive optics, coronagraphs, and integral field units will generate contrast levels two orders of magnitude deeper than the current state-of-the-art. These instruments will also provide spectra for each planet that they detect. In this talk, I will describe the tools required to directly image an extrasolar planet.

I will then discuss a new observing program that has a remarkably high detection efficiency and also leads to characterization studies of unprecedented detail.

Colloquium

All interested persons are cordially invited to attend.