

Doug Lin (UCSC)

Origin of Super Earths

A rich population of super-Earths are being discovered by both radial velocity surveys and transit searches. Based on a sequential accretion scenario, we construct population synthesis models for these exo-planets. Some important theoretical issues include: 1) what physical processes determine their mass-period and size-period distribution? 2) how do dynamical architecture emerge around any host star? 3) Why is there no super-Earth in the solar system? Based on these models, we extrapolate predictions which may soon be tested and calibrated by ongoing observations.

Host: Geoff Marcy
4 pm, Thursday in 1 Leconte