
EAPS Planetary Lunch Colloquium Series (PICS)

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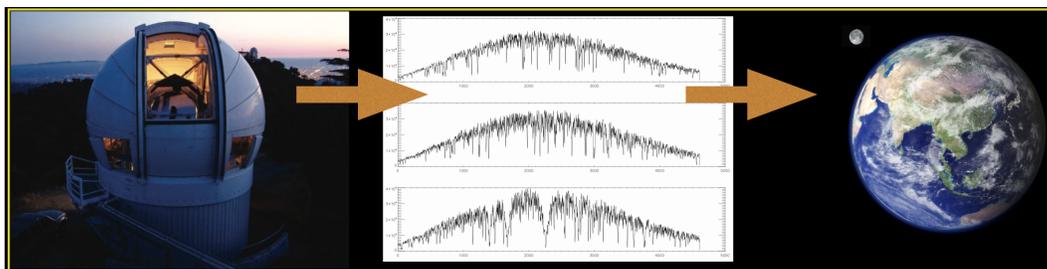
Tuesday, May 16th

12:30pm

54-517

A New Approach to Radial Velocity Measurements of Exoplanet Masses Using the APF Telescope

Radial velocity observations have been the preeminent way to measure the masses of planets orbiting other stars for almost two decades. The majority of RV surveys operate blindly, selecting stars that have spectral types and activity levels amenable to measuring shifts on the order of 1-10 m/s, but without any knowledge of whether or not those stars actually host planets. I will describe a new approach to exoplanet observations that capitalizes on the large number of exoplanets that we predict NASA's Transiting Exoplanet Survey Satellite (TESS, headquartered here at MIT) will detect around our brightest stellar neighbors. This new sample will provide our best chance of making additions to the planetary mass-radius diagram and of trying to understand the physics that guides planet formation and evolution.



For more information, contact John Biersteker (jo22395@mit.edu)