Joint Astronomy / EPS Colloquium March 8, 2007 Tea: 3:30pm, Astronomy Lounge Colloquium: 4:00pm, 1 Le Conte

## **AMAYA MORO-MARTIN**

**PRINCETON UNIVERSITY** 

## PLANETS, PLANETESIMALS AND DUST: PLACING OUR SOLAR SYSTEM INTO CONTEXT

The study of disks of dust around solar-type stars is helping us place our Solar System into context by shedding light into important questions about the origin and evolution of planetary systems, solar and exo-solar. In this talk, I will explain how observations (obtained mostly with the Spitzer Space Telescope) and theoretical models can be used to study: (a) the frequency and timing of terrestrial planet formation; (b) the nature and frequency of other major evolutionary events in the history of planetary systems (like the Late Heavy Bombardment in the early Solar System); and (c) the diversity of planetary systems, including medium-sized planets located far from the star and dusty planetesimal belts.