

WEEKLY CALENDAR

March 22, 2010

Departmental Colloquium

"Recent Discoveries in the Pluto System"

3:40 PM, March 25, 2010
109 Nicholson Hall

Marc Bouie
Southwest Research Institute Boulder

Host: Arlo Landolt

• *Refreshments served at 3:15 PM in 232 (Library) Nicholson Hall* •

I will present results from an unusually rich dataset collected on the Hubble Space Telescope. In 2002-2003 12 orbits of HST were dedicated to observations of the Pluto system using the then new Advanced Camera for Surveys. These images were designed to allow the construction of a map of Pluto's surface but it contained quite a few surprises. Covered in this talk will be techniques and results of the map construction, photometry of Pluto and Charon, astrometry of Charon, as well as astrometry and other constraints on the newly discovered moons, Nix and Hydra. These data constrain seasonal evolution of Pluto's surface, constraints on surface properties of Pluto and Charon, dynamical state of the satellite system, and masses of the individual objects in the system.