

**Thursday, March 10, 2011**  
**POSTER SESSION II: GIANT PLANETS, RINGS, AND OTHER THINGS**  
**6:00 p.m. Town Center Exhibit Area**

Mosqueira I. Estrada P. R.

[\*On the Origins of the Saturnian Moon-Ring System\*](#) [#2151]

We examine a recent proposal concerning the origin of Saturn's rings and inner moons by tidal mass stripping from the mantle of a differentiated Titan-sized satellite.

Yasui Y. Ohtsuki K. Daisaka H.

[\*Angular Momentum Transport in Planetary Rings: Effects of Self-Gravity and Spins of Particles\*](#) [#1135]

Using local N-body simulation for planetary rings consisting of self-gravitating particles with surface friction, we examine the dependence of viscosity on various parameters such as optical depth and normal and tangential restitution coefficients.

Tanigawa T. Ohtsuki K. Machida M. N.

[\*Gas Accretion Flow onto Circum-Planetary Disks\*](#) [#1822]

We investigated gas accretion flow onto circum-planetary disks around proto giant planets embedded in protoplanetary disks and found that gas accretion is occurred in the outer region of circum-planetary disks.

Tejfel V. G. Vdovichenko V. D. Bondarenko N. N. Karimov A. M. Kharitonova G. A.

Kirienko G. A. Sinyaeva N. V.

[\*Comparative Study of the Molecular Absorption Bands Behavior on Jupiter Before and at the Southern Equatorial Belt Disappearance\*](#) [#1356]

The preliminary results of the spectrophotometry of Jupiter in 2009 and 2010 are described to show the absence of significant differences of the molecular absorption during 2010 SEB disappearance in comparison with its state in 2009.

Cao H. Russell C. T. Joy S. P. Christensen U. R. Dougherty M. K.

[\*Different Behavior of the Magnetic Fields of Jupiter and Saturn\*](#) [#1218]

Despite their similar size, chemical composition, and rotation rate, Jupiter and Saturn produce very different magnetic fields. Thus it is unlikely that the physical conditions interior to these planets are so similar.

Lystrup M. Radioti A. Bonfond B. Grodent D.

[\*Jupiter's Aurora as Imaged by the NASA IRTF and Comparison with Hubble Space Telescope Observations in the UV\*](#) [#1877]

We investigate Jupiter's infrared aurora using observations from the NASA Infrared Telescope Facility from 1995–2000 as compared with observations in the UV from the Hubble Space Telescope.

Poppe A. R. Horányi M.

[\*The Effect of Nix and Hydra on the Putative Pluto-Charon Dust Cloud\*](#) [#1201]

We address the effect that Nix and Hydra have on the Pluto-Charon dust environment, via a particle tracing code. We find that Nix and Hydra contribute equal amounts to the optical depth of 0.5  $\mu\text{m}$  grains, for a net optical depth of  $4 \times 10^{-11}$ .

Kurokawa H. Nakamoto T.

[\*Radiation Limits of Ocean Planets: Effects of the Atmospheric Absorption of the Incoming Radiation with One-Dimensional Radiative-Convective Equilibrium Model\*](#) [#1328]

We investigate the effects of the absorption of the incoming radiation on the radiation limit of the troposphere of ocean planets. To clarify the effects, we use a simple parameterization of the absorption. We have found two important cases.