

Monday, March 10, 2008
OUTER PLANET SATELLITES: NOT TITAN, NOT ENCELADUS
2:30 p.m. Amphitheater

Chairs: **A. J. Dombard**
 M. R. Kirchoff

- 2:30 p.m. Patterson G. W. * Prockter L. M. Schenk P. M.
 Band Topography on Europa [#2522]
 Utilizing DEMs derived using photoclinometric and stereogrammetric techniques, we examine the nature of band formation on Europa.
- 2:45 p.m. Bierhaus E. B. * Zahnle K. Chapman C. R.
 Unresolved Characteristics of Europa's Crater Population [#2515]
 We describe complexities within the European cratering record that are surprising given the sparseness of the primary crater population.
- 3:00 p.m. Kirchoff M. R. * Schenk P. M.
 Cratering Records of Saturnian Satellites [#2234]
 We will present and compare the impact crater distributions of the mid-sized saturnian satellites. We will discuss implications for their geologic histories and impactor populations.
- 3:15 p.m. Schmedemann N. * Neukum G. Denk T. Wagner R. J.
 Stratigraphy and Surface Ages on Iapetus and Other Saturnian Satellites [#2070]
 This presentation is about the examination of the geologic history of the saturnian satellites by using crater counting for the determination of model ages. The main focus is on Iapetus but results of Enceladus and Mimas will serve for comparison.
- 3:30 p.m. Denk T. * Neukum G. Schmedemann N. Roatsch T. Wagner R. J. Giese B. Perry J. E.
 Helfenstein P. Turtle E. P. Porco C. C.
 Iapetus Imaging During the Targeted Flyby of the Cassini Spacecraft [#2533]
 During the targeted flyby of Iapetus by the Cassini spacecraft in September 2007, numerous high-resolution images have been obtained. Some of the discoveries and a possible explanation for the global brightness dichotomy riddle are described.
- 3:45 p.m. Hendrix A. R. * Hansen C. J.
 Iapetus: New Results from Cassini UVIS [#2200]
 The Cassini spacecraft performed a close flyby of the enigmatic saturnian moon Iapetus in September 2007. We present results from the Ultraviolet Imaging Spectrograph that illuminate volatile migration processes in the boundary region of the bright and dark terrains.
- 4:00 p.m. Dombard A. J. * Cheng A. F.
 Constraints on the Evolution of Iapetus from Simulations of Its Ridge and Bulge [#2262]
 We use finite-element techniques to investigate the conditions under which the lithosphere of Iapetus can support its equatorial ridge and bulge.

- 4:15 p.m. Wagner R. J. * Neukum G. Giese B. Roatsch T. Denk T. Wolf U. Porco C. C.
Geology of Saturn's Satellite Rhea on the Basis of the High-Resolution Images from the Targeted Flyby 049 on Aug. 30, 2007 [#1930]
The geology and stratigraphy of Rhea, observed by the Cassini ISS camera at high resolution in a recent targeted flyby (August 30, 2007), is discussed and compared to results from earlier flybys.
- 4:30 p.m. Chen E. M. A. * Nimmo F.
Thermal and Orbital Evolution of Tethys as Constrained by Surface Observations [#1968]
We determine conditions for the orbit and internal structure of Tethys to account for the high heat flux associated with the formation of Ithaca Chasma. We suggest that a subsurface ocean was present at some point in Tethys' history.