

**PRINT ONLY: OUTER PLANETS/SATELLITES**

Blankenship D. D. Peters M. E. Young D. A. Holt J. W.

*Radar Sounding of Europa's Icy Shell: The View After New Results from Mars and Antarctica* [#2409]

Disintegrating. Iceberg sounded by radar. Informs Europa?

Bray V. J. Smith D. E. Turtle E. P. Perry J. E. Rathbun J. A. Barnash A. N. Helfenstein P. Porco C. C.

*Impact Crater Morphology Variations on Enceladus* [#1873]

We have conducted mapping and measurement of craters on Enceladus. We have recorded their locations, diameters and morphological characteristics so that crater morphology variations in the different geological units can be assessed.

Greenberg R. Hurford T. A. Foley M. A. Varland K.

*Precision and Accuracy of Topography Measurements on Europa* [#1850]

Reports of the death of the melt-through model for chaotic terrain on Europa have been greatly exaggerated, to paraphrase Mark Twain. They are based on topographic maps of insufficient quantitative accuracy and precision.

Illés-Almár E.

*On the South Polar Vortex on Saturn* [#1135]

An attempt is made to interpret the recent discovery of the South Polar Vortex (SPV) on Saturn.

Kochemasov G. G.

*Calculating Size of the Saturn's "Leopard Skin" Spots* [#1040]

An IR image of the saturnian south (PIA08333) shows huge storm ~8000 km across containing smaller storms about 300 to 600 km across. Assuming a wave nature of this phenomena calculations with wave modulation give diameters of small forms ~400 km.

Nimmo F. Matsuyama I.

*Reorientation of Icy Satellites Due to Impact Basins* [#1237]

Large impact basins produce geoid anomalies sufficient to cause satellite reorientation, with implications for tectonics, crater distribution and models of interior structure.

Perov N. I. Medvedev Yu. D.

*The New Models of the Central Configurations for the Secondary Planets Systems and Their Stability* [#1026]

Plane central configurations from 4 to 19 bodies and their stability, based on the methods of A.M. Lyapunov, are considered. In the frames of these dynamical models motion of some satellites of the giant planets are partially explained.

Preblich B. Greenberg R. Norton-Riley J. O'Brien D. P.

*Strike-Slip on Europa: Viscoelastic Modeling of Tidally Driven Displacement* [#1766]

Tidal walking for strike-slip displacement on Europa is modeled using a finite-element numerical simulation of the behavior of viscoelastic material. Except under special assumptions, the process seems to require cracks penetrating to the liquid ocean. In no case is much heat produced.

Prentice A. J. R.

*Titan's Physical and Chemical Structure: Predictions for a Capture Origin* [#2402]

I report calculations for the bulk chemical composition and internal structure of Titan in readiness for measurements from the gravity flypasts by the Cassini spacecraft. The calculations are based on the idea that Titan is a captured moon of Saturn.

Shalygina O. S. Starukhina L. V. Marchenko G. P. Korokhin V. V.

*Polar Aerosol Haze in Jupiter's Stratosphere* [#1441]

Components of jovian stratospheric haze (crystal naphthalene, phenanthrene) may be formed by homogeneous nucleation, benzene does not condense at  $T > 120$  K. Cosmic rays may affect aerosol haze by production of molecules for aerosol formation.

Stern S. A. Mutchler M. J. Weaver H. A. Steffl A. J.

*The Positions, Colors, and Photometric Variability of Pluto's Small Satellites from HST Observations: 2005-2006* [#1722]

We report a self-consistent set of magnitudes, colors, and positions for Pluto's small satellites Nix and Hydra. We find Nix and Hydra to be neutrally colored and we find no evidence as yet for lightcurve variability.

Veeder G. J. Matson D. L. Davies A. G. Johnson T. V. Castillo-Rogez J. C.

*Io: Heat Flow from Dark Paterae* [#1331]

We focus on the heat flow contribution from the small dark paterae relative to that from the large dark paterae on Io. We have estimated the dark areas of over 100 small paterae and use effective temperatures to derive their total power.