

Tuesday, March 20, 2018
POSTER SESSION I: CELEBRATING CASSINI! II
 6:00 p.m. Town Center Exhibit Area

[T301]

- Hedman M. M. Nicholson P. D. El Moutamid M. *POSTER LOCATION #1*
[*Evidence for Changes in Saturn's Interior from Structures in Its Rings*](#) [#1288]
 Saturn's asymmetries / Produce patterns in the rings / They change over time.
- Perry M. E. Waite J. H. Jr. Perryman R. S. Mitchell D. G. *POSTER LOCATION #2*
 Cravens T. E. et al.
[*A New Understanding of the Interaction Between Saturn and Its Rings*](#) [#1979]
 The first in situ measurements of Saturn's exosphere reveal a complex and varied flux of molecules and particles flowing into Saturn from its rings.
- Pathhoff D. A. Kattenhorn S. A. Cooper C. M. *POSTER LOCATION #3*
[*Tiger Stripe Initiation: Enabled by Nonsynchronous Rotation*](#) [#2371]
 Rotating ice shell / Can initiate fractures / Thin south, thick north poles.
- Tian Z. Nimmo F. *POSTER LOCATION #4*
[*Testing Tidal Evolution of Enceladus with N-Body Integrations*](#) [#2912]
 We test previous models of Enceladus orbital evolution with an N-body code.
- Mitchell K. L. Hodyss R. Choukroun M. Molaro J. Le Gall A. *POSTER LOCATION #5*
[*Enceladus' Brilliant Surface 2: Rationalizing Cassini RADAR and Optical Remote Sensing*](#) [#2924]
 We propose that bright surfaces on Enceladus are the result sintering of fine particles during past periods of low or zero cryovolcanic activity.
- Roberts J. H. Stickle A. M. *POSTER LOCATION #6*
[*Breaking the Symmetry and the Ice Shell of Enceladus*](#) [#1746]
 Tides should heat both poles / How to break the symmetry? / Break through the ice shell.
- Weller M. B. Fuchs L. Becker T. W. Soderlund K. M. *POSTER LOCATION #7*
[*Towards Understanding Hemispheric Variations in Enceladus' Ice Shell: Variable Surface Temperatures, Convection, and Yielding*](#) [#2366]
 Sol's insolation / On curved icy surfaces / Alters convection.
- Dhingra D. Hedman M. M. *POSTER LOCATION #8*
[*Water-Ice Particles in Enceladus' Plume Exhibit Contrasting Altitudinal Trends in Launch Velocities: Implications for Sampling by Future Missions*](#) [#1923]
 Ice particles jump in Enceladus' plume / Some go high, some go low / Which ones do icy creatures like / We need to know.
- Hamp R. E. Ramkissoon N. K. Olsson-Francis K. *POSTER LOCATION #9*
 Schwenzer S. P. Pearson V. K.
[*The Physio-Chemical Properties for the Interior of Enceladus*](#) [#2101]
 Review of the known physical and chemical conditions for the sub-surface environment of Enceladus, and proposed modelling to determine the remaining properties.
- Craft K. L. Roberts J. H. *POSTER LOCATION #10*
[*Possible Fracture Formation Post-Impact on Enceladus*](#) [#1930]
 Impact then ice once more / Stresses combine or cancel. / Do fractures form?
- Nunn C. K. Kral T. A. *POSTER LOCATION #11*
[*An Experimental-Modeling Approach to Determine Enceladus' Interior Hydrogen Generation*](#) [#2499]
 Icy moon ocean / Water and rock reacting / What's in that liquid?

Hansen C. J. Hendrix A. R. Esposito L. W. **POSTER LOCATION #12**
[Observations of Stellar Occultations to Look for Plumes from Dione and Tethys](#) [#2446]

Cassini UVIS observations of stellar occultations do not detect Dione active eruptions or gas emanating from Tethys' red surface streaks.

Ferguson S. N. Rhoden A. R. Bierhaus E. B. **POSTER LOCATION #13**
[Interpreting the Small Crater Record of Tethys and the Role of Secondary Craters](#) [#2766]

We compare detailed regional crater maps on Tethys with secondary crater maps from the Odysseus impact basin to determine the role of secondaries in our dataset.

Filacchione G. Ciarniello M. D'Aversa E. Capaccioni F. Cerroni P. et al. **POSTER LOCATION #14**
[Photometric-Corrected Albedo Maps of Tethys by Cassini-VIMS](#) [#1396]

We report about photometric correction necessary to derive visible-infrared albedo maps and spectral indicators of Tethys surface from Cassini-VIMS data.

Detelich C. E. Byrne P. K. Dombard A. J. Schenk P. M. **POSTER LOCATION #15**
[Investigating the Morphology of the Iapetus Equatorial Ridge](#) [#1356]

Investigation of Iapetus's enigmatic equatorial ridge through observations in morphology of the ridge as well as through crater areal density analysis.

Daly R. T. Ernst C. M. Gaskell R. W. Barnouin O. S. Thomas P. C. **POSTER LOCATION #16**
[New Stereophotoclinometry Shape Models for Irregularly Shaped Saturnian Satellites](#) [#1053]

We are developing new or updated SPC shape models for Atlas, Calypso, Epimetheus, Helene, Hyperion, Janus, Pan, Pandora, Phoebe, Prometheus, and Telesto.