

Wednesday, March 22, 2017

[W405]

**NEW HORIZONS VIEWS OF PLUTO AND CHARON:
SO LONG AND THANKS FOR ALL THE BITS
8:30 a.m. Montgomery Ballroom**

**Chairs: William McKinnon
Adrienn Luspay-Kuti**

- 8:30 a.m. Grundy W. M. * Binzel R. P. Buie M. W. Cook J. C. Cheng A. F. et al.
[Haze and Cosmic Ray Influences on Pluto's Compositional Environments](#) [#2165]
Pluto's haze contributes a key surface ingredient. We consider how it influences various environments. Episodes of atmospheric collapse appear to be required.
- 8:45 a.m. Luspay-Kuti A. * Mandt K. E. Jessup K. Hue V. Kammer J. A. et al.
[The Role of Aerosols in Pluto's C2 Hydrocarbon Photochemistry](#) [#1458]
New Horizons hydrocarbon profiles closely matched with new Pluto model. Aerosols become less sticky with age, which is necessary to explain vertical profiles.
- 9:00 a.m. Buhler P. B. * Ingersoll A. P.
[Sublimation Pit Distribution Indicates Convection Cell Surface Velocity of ~10 Centimeters per Year in Sputnik Planitia, Pluto](#) [#1746]
The surface velocity of convection cells in Sputnik Planitia, Pluto is 9–18 cm/yr, based on their sublimation pit size distribution.
- 9:15 a.m. Moores J. E. * Smith C. L. Toigo A. D. Guzewich S. D.
[Penitentes at Tartarus Dorsa, Pluto](#) [#1664]
Combining a terrestrial model with PlutoWRF, we find that the spacing, age/size, and orientation of Pluto's Bladed Terrain is consistent with Penitentes.
- 9:30 a.m. McKinnon W. B. * Schenk P. M. Mao X. Moore J. M. Spencer J. R. et al.
[Impact Origin of Sputnik Planitia Basin, Pluto](#) [#2854]
Ancient Kuiper belt / A great impact basin forms / Deep oblique awesome.
- 9:45 a.m. Cook J. C. * Dalle Ore C. M. Binzel R. P. Cruikshank D. P. Earle A. et al.
[Mapping Charon at 2.21 Microns](#) [#2236]
New Horizons/LEISA spectra of Charon are used to map the distribution of the 2.21 micron band, related to ammonia.
- 10:00 a.m. Beyer R. A. * Spencer J. R. McKinnon W. B. Moore J. Robbins S. J. et al.
[Geology of Vulcan Planum, Charon](#) [#2679]
Charon's large smooth plain / Rilles, mountains, depressions, flows / Cryovolcanism!