

**Tuesday, March 21, 2017**  
**COMET 67P/CHURYUMOV-GERASIMENKO AND OTHER COMETS**  
**8:30 a.m. Montgomery Ballroom**

[T205]

- Chairs:** Carey Lisse  
Michael DiSanti
- 8:30 a.m. El-Maarry M. R. \* Groussin O. Thomas N. Pajola M. Auger A.-T. et al.  
[Remarkable Surface Changes of Comet 67p/Churyumov-Gerasimenko's Nucleus Around Perihelion](#) [#2791]  
We present the most remarkable changes that have occurred on the surface of comet 67P after its perihelion passage.
- 8:45 a.m. Pajola M. \* Mottola S. Hamm M. Fulle M. Davidsson B. et al.  
[A Multi-Resolution Analysis of the Boulders/Pebbles on Comet 67P Churyumov-Gerasimenko: The OSIRIS-ROLIS Joint Observations](#) [#1069]  
The multi-resolution (OSIRIS-ROLIS) analysis of the SFD boulders/pebbles located on the Agilkia landing site of Comet 67P is presented.
- 9:00 a.m. Birch S. P. D. \* Tang Y. Hayes A. G. Kirk R. L. Bodewits D. et al.  
[Geomorphology of Comet 67P/Churyumov-Gerasimenko](#) [#2036]  
We present a geomorphological map of comet 67P. Our study puts into greater context previous works on this topic, and links 67P to previously visited nuclei.
- 9:15 a.m. Johnson K. E. \* Singh S. McCord T.  
[Study of the 2.7 Micron Absorption Band Found on Comet 67P/CG](#) [#2954]  
A study of the two types of absorption bands found on comet 67P/CG. Both appear at 2.7 microns, but one is a double peak and one is a single peak.
- 9:30 a.m. Ciarletti V. \* Lasue J. Herique A. Lemonnier F. Kofman W. et al.  
[Characterizing the Interior of 67P/Churyumov-Gerasimenko](#) [#2249]  
Our purpose is to use CONSERT's data to provide constraints about the heterogeneity inside the 67P nucleus at spatial scales up to 10 meters.
- 9:45 a.m. Ivanovski S. L. \* Della Corte V. Rotundi A. Fulle M. Fougere N. et al.  
[The 67P/Churyumov Gerasimenko Dusty Coma Analysed with Aspherical Dust Dynamical Simulations Constrained by GIADA Measurements in February and March 2015](#) [#2043]  
The GIADA particle speeds in February and March 2015 have been reproduced using aspherical dust model and gas solutions constrained by the ROSINA data.
- 10:00 a.m. Keeney B. A. \* Stern S. A. A'Hearn M. F. Bertaux J.-L. Feaga L. M. et al.  
[H<sub>2</sub>O and O<sub>2</sub> Absorption in the Coma of Comet 67P/Churyumov-Gerasimenko Measured by the Alice Far-Ultraviolet Spectrograph on Rosetta](#) [#1275]  
O<sub>2</sub> in coma? / ROSINA discovered it / But Alice finds more.
- 10:15 a.m. Paquette J. A. \* Fray N. Cottin H. Bardyn A. Hilchenbach M.  
[The <sup>18</sup>O/<sup>16</sup>O Ratio in Cometary Dust and Other New Results from Cosima](#) [#1445]  
The oxygen isotopic ratio <sup>18</sup>O/<sup>16</sup>O measured in cometary dust from comet 67P using the Rosetta/COSIMA instrument will be presented.
- 10:30 a.m. Deca J. \* Divin A. Henri P. Eriksson A. Markidis S. et al.  
[The Role of Electron Dynamics in the Solar Wind Interaction with Comet 67P/Churyumov-Gerasimenko at 3 AU](#) [#1315]  
Using a self-consistent 3D full-kinetic PIC approach, we disentangle the ion and electron dynamics of the solar wind interaction with a weakly outgassing comet.

- 10:45 a.m. Scheeres D. J. \* Hirabayashi M. Chesley S. R. McMahon J. W. Marchi S.  
[Constraints on the Past Spin Rate of Comet 67P/C-G](#) [#1564]  
The nucleus of 67P/C-G was likely spinning with a period less than nine hours within the last 5 K years, fast enough to have formed the cracks on its neck region.
- 11:00 a.m. Zambrano-Marin L. F. \* Virkki A. Rivera-Valentin E. G.  
[Comparing Near-Surface and Bulk Densities of Comets Using Radar Scattering Properties](#) [#2835]  
Comparison of near-surface and bulk-density calculations with spacecraft measurements of selected Comets.
- 11:15 a.m. DiSanti M. A. \* Dello Russo N. Bonev B. P. Vervack R. J. McKay A. J. et al.  
[Compositional Study of Jupiter Family Comet 45P/Honda-Mrkos-Pajdusakova Near Perihelion Using iSHELL at the NASA-Infrared Telescope Facility](#) [#2899]  
We obtained spectra of 45P that allow measuring its volatile composition. The favorable Doppler shift (–35 km/s) provided sensitive measures of CH<sub>4</sub> and CO.
- 11:30 a.m. Lisse C. M. \* Sitko M. L. Marengo M. Vervack R. J. Jr. Fernandez Y. R. et al.  
[HR 4796A: A Nearby ExoSystem Hosting a Dense Bright Ring of Active Comets](#) [#2128]  
Using the NASA/IRTF 3m we find that the beautiful, narrow HR 4796A circumstellar ring is a sheperded belt of comets associated with a planet-building event.