**Thursday, March 22, 2018 [R606]**
**POSTER SESSION II: COMETS: COMPOSITION, EVOLUTION, AND DYNAMICS**
**6:00 p.m. Town Center Exhibit Area**

Heather D. J. Aberasturi M. Barthelemy M. Fraga D. O'Rourke L. et al. ***POSTER LOCATION #107***
*The Rosetta Science Archive: Enhancing the Science Archive Content* **[#2132]**
The current status of the Rosetta science archive is presented along with some enhanced archiving activities/products planned for the final archive.

Czechowski L. Kossacki K. J. ***POSTER LOCATION #108***
*Dynamics of Landslides on Comet 67P/Churyumov–Gerasimenko* **[#2503]**
Dynamics of landslides on comet 67P/Churyumov–Gerasimenko is investigated.

Birch S. P. D. Tang Y. Hayes A. G. Umurhan O. Bodewits D. et al. ***POSTER LOCATION #109***
*Origin and Evolution of the Landscapes of Comet 67P/Churyumov-Gerasimenko* **[#2090]**
We utilized the MARSSIM landscape evolution model to understand the dominant process(es) that have shaped the landscapes of comet 67P.

Molaro J. L. Becerra P. Herny C. Marschall R. El-Maarry M.-R. et al. ***POSTER LOCATION #110***
*Thermally Driven Formation of Fractures on Comet 67p/Churyumov-Gerasimenko* **[#2881]**
We investigate the role of thermally induced stresses in fracture propagation at the surface of comet 67P/C-G by relating simulations to observations.

Belton M. J.S. Zou X.-D. Li J.-Y. Asphaug E. I. ***POSTER LOCATION #111***
*On the Origin of Internal Layers in 67P/Churyumov-Gerasimenko* **[#2966]**
We hypothesize "phase-change mechanism" for the formation of layers. It may eradicate evidence of the way the nucleus was originally formed in primeval times.

Penasa L. Massironi M. Franceschi M. Naletto G. Ferrari S. et al. ***POSTER LOCATION #112***
*Layering on Comet 67P/Churyumov-Gerasimenko: Insights from Three-Dimensional Modeling* **[#2077]**
We will review the present-day knowledge about the layers identified on comet 67P thanks to Rosetta mission with the aid of geological 3D modelling techniques.

Kappel D. Otto K. Oklay-Vincent N. Michalik T. Kuehrt E. et al. ***POSTER LOCATION #113***
*Regolith Dynamics Simulations of Test Scenarios for Comet 67P/Churyumov-Gerasimenko* **[#2696]**
We reproduce several morphological features observed on comet 67P using discrete element modeling of its surface particles to infer mechanical grain properties.

Pajola M. Lee J. C. Oklay N. Hviid S. F. Fornasier S. et al. ***POSTER LOCATION #114***
*Multidisciplinary Analysis of the Hapi Region on Comet 67P/Churyumov-Gerasimenko* **[#1872]**
The multidisciplinary analysis of the Hapi region located on Comet 67P/Churyumov-Gerasimenko is presented.

Stenzel O. J. Hilchenbach M. Paquette J. A. Rynö J. ***POSTER LOCATION #115***
*Alkali Metals and Other Elements in 67P/Churyumov-Gerasimenko Dust Particles* **[#2410]**
The Time of Flight Secondary Ion Mass Spectrometer Rosetta/COSIMA is used to investigate alkali metals and other elements in dust particles from 67P's coma.

Clark C. S. Clark P. E. ***POSTER LOCATION #116***
*Progress Report: Constant-Scale Natural Boundary Mapping to Depict Material Transport on Comet 67P/Churyumov-Gerasimenko* **[#2879]**
We present a complementary pair of maps of 67P/C-G designed to depict and facilitate understanding of seasonal material transport.

Maroger I. Lasue J. Botet R. Garnier Ph. Merouane S. et al. ***POSTER LOCATION #117***
*Compacted Loose Particles from Numerical Simulations Compared to Rosetta Collected Particles* **[#2149]**
Properties of dust particles collected by COSIMA can be explained with two different initial fractal dimensions or a range of internal cohesive strengths.

Combe J.-Ph. McCord T. B. ***POSTER LOCATION #118***
*Calculating a Distribution of Surface Temperatures from Thermal Emission in Near-Infrared Spectra: Application to Comet 67P/C-G and (1) Ceres* **[#2288]**
We present an inversion technique for near-infrared spectra analysis in order to retrieve the distribution of surface temperatures for each spectrum (pixel).

Sava P C. Asphaug E. Haynes M. ***POSTER LOCATION #119***
*3D Monostatic Wavefield Tomography of Comet Interiors* **[#1996]**
Dense radar echoes acquired from orbit can generate high resolution 3D images of comet interiors revealing the nucleus accretion and collisional evolution.

Ledbetter W. G. Sood R. Keane J. T. ***POSTER LOCATION #120***
*The Interior Structure of Asteroids and Comets Revealed by ChipSat Swarm Gravimetry* **[#2136]**
Silicon Wafer Integrated Femtosatellites are used to improve the quality of flyby gravimetry and better understand the interiors of small bodies.

Fries M. Archer D. Christou T. Conrad P. Eigenbrode J. et al. ***POSTER LOCATION #121***
*Testing the Martian Methane from Cometary Debris Hypothesis: The Unusually Close 24 Jan 2018 Interaction Between Comet C/2007 $H_2$ (Skiff) and Mars* **[#2877]**
We can talk some more / Or we can go measure it / Time for some science!

Lisse C. M. Bolin B. T. Weaver H. A. Fernandez Y. R.
Huppenkothen D. et al. ***POSTER LOCATION #122***
*APO Photometric Imaging of the First Detected Interstellar Object in the Solar System: 1I/'Oumuamua* **[#2610]**
Using r'g'i' photometric imaging, we recently observed and characterized the first ever discovered interstellar object to pass through our solar system.