Friday, March 25, 2016 **[F703]**
ASTEROIDS, NEOS, METEORS, AND OTHER SPACE ODDITIES
8:30 a.m. Waterway Ballroom 5

Chairs: **Andrew Rivkin**
Sherry Fieber-Beyer

8:30 a.m. Graves K. J. * Minton D. A. Hirabayashi M.
The Formation of Q-Type Asteroids from YORP Spin-Up and Fission **[#2187]**
To make all Q-types / Tides are not nearly enough / YORP, to save the day!

8:45 a.m. Tardivel S. * Sánchez P. Scheeres D. J.
The Story of 2008 EV5 — Evidence of Fission **[#1036]**
A small world severed / EV5's concavity / Telltale of its past.

9:00 a.m. Michel P. * Jutzi M. Goodrich C. A. O'Brien D. P. Richardson D. C. et al.
Selective Sampling During Catastrophic Disruption: The Effect of the Parent Body's Size and the Impact Energy Regime **[#1413]**
Numerical models of disruptions in low impact energy regimes show that larger remnants sample a depth of the parent body close to the one expected for ureilite.

9:15 a.m. Okada T. *
Thermal Inertia of Surface Materials of Solar System Small Bodies and Its Dependence on Porosity **[#1457]**
Dependency of porosity on thermal inertia under micro-gravity and vacuum conditions like an asteroid surface is investigated using the past experimental data.

9:30 a.m. Arnold J. A. * Schräpler R. Donaldson Hanna K. L. Lindsay S. S. Bowles N. E. et al.
The Effect of Porosity on Infrared Spectra **[#2847]**
We present measured and modeled spectra of high-porosity silica samples, an analog to "fairy-castle" structures.

9:45 a.m. Legett C. IV * Glotch T. D. Lucey P. G.
Characterizing the Optical Effects of the Finest Fractions of the Solar System: Nanophase Absorbers in Transparent and Scattering Matrices **[#2967]**
Very tiny stuff / Makes spectroscopy quite hard / Hides spectral features.

10:00 a.m. McMahon J. W. * Farnocchia D. Scheeres D. J. Chesley S. R.
Understanding Kaula's Rule for Small Bodies **[#2129]**
Kaula's rule is used to bound uncertainty on a gravity field prior to being estimated. Here we show how this should be modified for application to small bodies.

10:15 a.m. Taylor P. A. * Richardson J. E. Rivera-Valentin E. G. Rodriguez-Ford L. A. Zambrano-Marin L. F. et al.
Radar Observations of Near-Earth Asteroids from Arecibo and Goldstone **[#2772]**
We will present a subset of radar results from the 108 near-Earth asteroids detected with Arecibo and Goldstone in 2015 from spheroids to peanuts and binaries.

10:30 a.m. Charnoz S. Rosenblatt P. Dunseath K. M. Terao-Dunseath M. Trinh A. et al.
Formation of Phobos and Deimos in a Giant Collision Scenario Facilitated by a Large Transient Moon **[#1943]**
We study the origin of Phobos and Deimos in a giant impact. We form Phobos and Deimos successfully with the right masses and orbit for the first time.

10:45 a.m. Galache J. L. Beeson C. L. McLeod K. K. Elvis M. *
The Need for Speed in Near-Earth Asteroid Characterization **[#2745]**
To obtain good orbits and compositions of the bulk of near-Earth asteroids requires a dedicated 4-meter class telescope to take data within 10 days of discovery.

11:00 a.m. Rivkin A. S. * Emery J. P. Howell E. S.
The L-Band Main-Belt and NEO Observing Program (LMNOP): Some Final Results from Phase 1 **[#1975]**
Though black to the eye / In infrared, asteroids' / Varied natures shine.

11:15 a.m. Plesko C. S. * Ferguson J. M. Gisler G. R. Weaver R. P.
Impact Hazard Mitigation Research at Los Alamos National Laboratory: Current Status **[#2764]**
LANL is modeling PHO mitigation by kinetic impactor, nuclear stand-off burst, and nuclear impactor, as part of an NNSA/NASA collaboration on impact prevention.

11:30 a.m. Sansom E. K. * Bland P. A. Rutten M. G.
Exploring Advanced Estimators from Guidance, Navigation and Control in Fireball Modelling **[#1892]**
Advanced estimators used in the field of guidance, navigation and control are able to fully characterise a meteoroid during its trajectory through the atmosphere.