How Abundant are Different Meteorite Groups Among S-Complex and O-Type Near-Earth Asteroids? \#1968
LL-like NEAs are much more abundant than H- and L-like NEAs. However, ureilites and acapulcoites/lodranites could also be present among these bodies.

Spectral Variations of D-Type Asteroids at Different Heliocentric Distances \#1088
The purpose of this research is to attempt to constrain the spectral differences of D-type asteroids by location and better constrain their geophysical properties.

We present the analysis of 2521 Heidi and 2875 Lagerkvist, two core members of the Gefion dynamical asteroid family, and 5134 Ebilson.

We present a new approach to estimate the terminal height of impacting bolides, which is an essential step in evaluating the impact hazard.

We present kinetic and nuclear deflection models for Bennu and Didymos B in support of the NASA/NNSA hazard mitigation collaboration.

Meteorite physical properties help determine parent body properties, behavior of asteroids during atmospheric entry, and methods to deflect hazardous objects.
Dunham E. Desch S. J. Perera V. Schwartz S. R.

POSTER LOCATION #136

Modeling the Axis Ratios of a Differentiated Haumea to Determine Its Internal Structure [2438]

What axis ratios / For a spinning Haumea / If it’s rock and ice?

Senshu H. Morota T. Yokota Y. Sakatani N.

POSTER LOCATION #137

Numerical Model on the Albedo of Rough Surfaces [1950]

We numerically construct rough surfaces and calculate the albedo of the surface to clarify the relationship between laboratory obtained and bulk albedos.

Yamada T. M. Ando K. Morota T. Katsuragi H.

POSTER LOCATION #138

A Modified Asteroid Resurfacing Model Induced by Regolith Convection [1796]

We report a slightly improved model asteroidal resurfacing by regolith convection. The model allows us to re-evaluate the resurfacing timescale.

Polishook D. Moskovitz N. Thirouin A. Bosh A. Levine S. et al.

POSTER LOCATION #139

The Fast Spin of Near-Earth Asteroid (455213) 2001 OE84, Revisited After 14 Years — Arguments for a Highly Cohesive Internal Structure [1323]

Asteroid 2001OE84 has a unique combination of size and spin period. We found its spin did not change in 14 years, thus we can constrain its highly cohesive nature.

Zeszut Z. Harvey R. Gaier J. Kleinhenz J. Waters D. et al.

POSTER LOCATION #140

Measurements of Adhesion Values of Meteorite Materials and Their Applications to Asteroids [2389]

C asteroids are made out of goo, and CM2 meteorites are, too. Finding out if they’re sticky, can be kind of tricky, but I’ll show you just what you can do.

Wyrick D. Y. Patterson R. Murphy A. Bağaoğlu H.

POSTER LOCATION #141

The Fluid Behavior of Regolith on Dry Airless Bodies [2776]

Non-sphericity / Influencing regolith / To act fluidly.

Dobrica E. Nuth J. A. Brearley A. J.

POSTER LOCATION #142

Experimental Hydrothermal Alteration of Amorphous Materials: Insights into Early Fluid-Assisted Hydration Processes on Asteroids [2865]

We performed three hydrothermal alteration experiments of amorphous silicate to be able to constrain the chemical reactions and the role of fluids on asteroids.


POSTER LOCATION #143

Thermal Conductivity Model of Powders Under Vacuum Based on Experimental Studies [1552]

We present a new model of thermal conductivity for powdered materials such as air-less planetary regolith, verified by our many experimental research.

Ogawa K. Sakatani N. Tsuda S. Ogawa M. Honda R. et al.

POSTER LOCATION #144

Thermal Conductivity Measurement of Sintered Glass Beads and Implication for Thermal Evolution of Planetesimal [1887]

Thermal conductivity of sintered glass beads was measured in vacuum. Planetesimal thermal calculations were conducted with considering the measurement results.

Pohl L. Britt D. T.

POSTER LOCATION #145

Thermal Dependent Heat Conductivity and Capacity in Asteroid Thermal Calculations [2820]

We use newly available data on thermal dependence of heat capacity and conductivity to test this effect on temperature distribution within main belt asteroids.

Pohl L. Britt D. T.

POSTER LOCATION #146

Temperature Dependent Thermal Expansion of Asteroids [2642]

We determine the significance of thermal dependency of heat expansion of asteroid materials for changes in volume and shape during an asteroid’s orbit.

**POSTER LOCATION #147**

*Preserving Shape and Spin in Asteroid Reaccumulation Simulations with SSDEM [#2810]*

Here we include shape and spin in models of reaccumulation of asteroids following catastrophic collisions.

Whizin A. D.  Abell P. A.  Brisset J.  Britt D.  Colwell J. C. et al.

**POSTER LOCATION #148**

*The Strata-1 Microgravity Experiment on Small Body Regolith Dynamics [#3043]*

We are presenting the first science results from the Strata-1 mission aboard the ISS which is intended to shed light on asteroid surface processes.

Chrbolkova K.  Capek D.

**POSTER LOCATION #149**

*The YORP Effect on Asteroids with Heterogeneous Distribution of Surface Thermophysical Properties [#1412]*

We studied how much is the YORP effect influenced by heterogeneous surface properties (caused by landslides or impacts) compared to the homogeneous ones.


**POSTER LOCATION #150**

*Anticipated Electrical Environment at Phobos [#1410]*

We show the expected surface potential for Phobos for periods when the airless body is immersed in the solar wind and during a solar storm.

Pajola M.  Roush T.  Dalle Ore C.  Marzo G. A.  Simioni E.

**POSTER LOCATION #151**

*Phobos MRO/CRISM Visible and Infrared (0.4–2.5 µm) Spectral Clustering [#1067]*

Spectral clustering on the Phobos CRISM Vis and IR dataset is presented, together with the intimate mineralogical mixtures used to model the derived spectra.

Truong N.  Lee P.

**POSTER LOCATION #152**

*Origin of Phobos and Deimos by Giant Impact: Lessons from Terrestrial Tektites [#3039]*

By analogy to terrestrial tektites, if Phobos and Deimos were formed by giant impact, one should not necessarily expect them to be devoid of water.

Lee P.

**POSTER LOCATION #153**

*Phobos and Deimos: A Possible Comet Connection [#3042]*

Phobos and Deimos are similar in size and spectrum to 3552 Don Quixote, an unusual cometary D-type NEA. Were Phobos and Deimos once cometary?

Curren I. S.  Walker M. E.

**POSTER LOCATION #154**

*Tidally Induced Strike-Slip Faulting on Phobos: Stress Model Predictions, Geologic Observations, and Analogue Experiments [#2330]*

We reconcile model predicted strike-slip displacements along grooves on Phobos’ surface with the absence of discernible offsets through analogue experiments.

Ramsley K. R.  Head J. W.

**POSTER LOCATION #155**

*Phobos Grooves from Stickney Impact Boulder Ejecta: Testing the Hypothesis [#2084]*

To test the hypothesis that rolling boulders from Stickney Crater produced the grooves of Phobos, we assess a model of boulder ejecta motions from Stickney.

Fries M.  Cintala M.  Steele A.  Welzenbach L. C.

**POSTER LOCATION #156**

*Dust Infall onto Phobos and Deimos Can Explain Their Carbonaceous Reflectance Signature, Perhaps Overlying a Mars-Impact-Origin Core: A Hypothesis [#2570]*

Fear and Dread wear cloaks / To hide their true origin / The War God’s children.