

PLANETARY VOLCANISM II: ... [R613]

Cassanelli J. P. and Head J. W. [#219] Evaluating the Role of Large-Scale Lava-Ice Interactions During Elysium Planitia Volcanism and the Formation of Athabasca Valles [#1125]
Palumbo A. et al. [#220] Exploring the Influence of Volcanism-Induced Heating on the Early Climate of Mars [#2169]

Head J. W. III et al. [#221] Volcanic Ash (Tephra) Deposition as a Mechanism for Melting Snow and Ice in a Late Noachian Icy Highlands Climate [#2246]

PLANETARY TECTONICS AND INTERIOR DYNAMICS [R614]

Boukaré C.-E. et al. [#251] Cumulate Mantle Dynamic Response to Magma Ocean Cooling History [#2033]

LUNAR VOLCANISM II [R616]

Wilson L. and Head J. W. [#282] Lunar Basaltic Volcanic Eruptions: Gas Release Patterns and Variations in Lava Vesicularity: 1. Lava Ponds, Shield Volcanoes, Foams, and Irregular Mare Patch (IMP) Morphology [#1325]

MARS FUTURE EXPLORATION AND LANDING SITES [R626]

Bramble M. S. et al. [#421] Stratigraphy of the Northeast Syrtis Major Mars 2020 Landing Site and the Ejecta of Jezero Crater, Mars [#1705]

AQUEOUS ALTERATION ON MARS III: ... [R632]

Kaufman S. V. et al. [#493] Characterization of the Alteration of Antarctic Ash: The Products of a Cold and Icy Environment [#2375]

MINERALOGY OF MARS FROM ORBITAL DATA II: ... [R633]

Kremer C. H. et al. [#509] Origin and Emplacement of the Circum-Isidis Olivine-Rich Unit [#1545]

Robertson K. M. [#512] Spectral and Mineralogical Diversity of the Polyhydrated Sulfate Class in Valles Marineris [#1985]

Tarnas J. D. et al. [#518] Characterization of Serpentine and Carbonate in Mars 2020 Landing Site Candidates Using Integrated Dynamic Aperture Target Transformation and Sparse Unmixing (IDATTSU) [#2236]

MARS ICE AND POLAR PROCESSES [R638]

Jawin E. R. et al. [#631] Late-Stage Paraglacial Activity on Mars: Formation of Washboard Terrain [#1154]

MARS CRATER MORPHOLOGY [R639]

Boatwright B. D. and Head J. W. [#646] Evolution of Crater Depth-Diameter Power Laws as a Proxy for Degradation [#2630]

Friday Morning, March 23, 2018

LUNAR GEOPHYSICS: GRAVITY, TECTONICS, AND ... [F701]
8:30 a.m. Waterway Ballroom 1

10:00 a.m. Deutsch A. N. et al.

GRAIL-Identified Gravity Anomalies in Procellarum: Insight into Subsurface Impact and Volcanic Structures on the Moon [#1521]

MARTIAN GEOCHEMISTRY, PETROLOGY, AND CHRONOLOGY I [F702]
8:30 a.m. Waterway Ballroom 4

9:15 a.m. Krantz J. A. et al.
Sequestering Noble Gases in Early Hydrated Crusts on Mars [#2321]

DREAMS OF A GLACIAL MARS [F704]

8:30 a.m. Waterway Ballroom 6

11:30 a.m. Denton C. A. and Head J. W.
Mapping the Fretted Terrain North of Arabia Terra, Mars: Results and Implications for Dichotomy Boundary Evolution [#1597]

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Guide to
BROWN
UNIVERSITY
speakers
and presenters

Monday Morning, March 19, 2018

MARS DOWNSLOPE MASS MOVEMENT I [M103]

8:30 a.m. Waterway Ballroom 5

11:30 a.m. Johnson B. C. et al.

Fall Height and Volume Control Landslide Mobility Throughout the Solar System [#1555]

ASTROBIOLOGY I: LOOKING FOR LIFE [M104]

8:30 a.m. Waterway Ballroom 6

8:45 a.m. Tarnas J. D. et al.

Radiolytic H₂ Production, Transport, and Dissolution on Noachian Mars [#2073]

Monday Afternoon, March 19, 2018

MARS ATMOSPHERE [M151]

2:30 p.m. Waterway Ballroom 1

3:15 p.m. Palumbo A. and Head J.

Characterizing a Warm and Wet Early Martian Climate with a 3D Global Climate Model [#2699]

Tuesday Morning, March 20, 2018

EARLY MARS SURFACE PROCESSES I: [T201]

8:30 a.m. Waterway Ballroom 1

8:45 a.m. Head J. W. III et al.

Two Oceans on Mars?: History, Problems, and Prospects [#2194]

11:30 a.m. Cassanelli J. P. and Head J. W.

Assessing the Formation of Valley Networks on a Cold Early Mars: Predictions for Erosion Rates and Channel Morphology [#1124]

Tuesday Afternoon, March 20, 2018

ORIGIN AND IGNEOUS EVOLUTION OF THE MOON [T255]

1:30 p.m. Waterway Ballroom 6

2:00 p.m. Pieters C. M. et al.

Abundance and Distribution of Lunar Primary Crust Anorthosite: The Featureless Plagioclase Challenge [#1698]

IMPACTS I: PLANETARY IMPACT CRATERING [T256]

1:30 p.m. Montgomery Ballroom

2:00 p.m. Wiggins S. E. et al.

Impact-Generated Porosity at Depth Within the Lunar Crust [#2157]

3:45 p.m. Silber E. A. and Johnson B. C.

Formation of Multiring Basins on Europa [#1349]

4:00 p.m. Bjonnes E. E. et al.

Formation of Impact Craters on Ganymede and Callisto as a Constraint on Ice Shell Structure [#1548]

Tuesday Evening, March 20, 2018

POSTER SESSION I 6:00 p.m. Town Center Exhibit Area

MARS VALLEY NETWORKS, LAKES, AND MORE: ... [T310]

Denton C. A. and Head J. W. [#118] Subsurface Hydrologic Activity in Northern Arabia Terra: Implications for Formation of Fretted Channels [#1607]

Pascuzzo A. C. et al. [#119] The Origin of Enigmatic Ridges Networks, Nili Fossae, Mars: Implications for Extensive Subsurface Fluid Flow in the Noachian [#2268]

Boatwright B.D. and Head J.W. [#122] Synthesis of Nonlocal, Nonlinear, and Noisy Models of Sediment Transport: Application to Planetary Landform Evolution Modeling? [#2617]

MARS DOWNSLOPE MASS MOVEMENT II: ... [T311]

Huber C. et al. [#124] Dry Versus Wet Conditions for RSL [#1472]

ENVIRONMENTAL ANALOGS II: WATER AND ICE PROCESSES [T318]

Quintal H. et al. [#203] McMurdo Dry Valleys: Exploring Antarctica as a Mars Analogue [#2627]

LUNAR REMOTE SENSING: LOOK BUT DON'T TOUCH! [T322]

Robertson K. M. et al. [#250] Radiative Transfer Modeling of Ilmenite in Lunar Basalts, Physical Mixtures, and Implications for Mapping of Titanium on the Moon [#1968]

Tokle L. et al. [#252] Development of an Fe-Mg Compositional Calibration for the Ilmenite — Geikielite Solid-Solution Using XRD and Reflective Spectroscopy [#2095]

Ji J. Z. et al. [#260] Quantitative Analysis of Minerals Across the Orientale Basin on the Moon [#2068]

Yang Y. et al. [#264] Data Reduction of FTIR Thermal Emission Measurements Under Cold Vacuum Conditions: Processing of Interferograms vs. Spectra [#1803]

Yang Y. Li S. et al. [#265] Particle Phase Functions of Typical Lunar Minerals Derived from Photometric Spectral Measurements [#1784]

LUNAR CHRONOLOGY AND CRATERING [T324]

Ji J. Z. et al. [#321] Impact Basin Melt Seas: Morphologic/Morphometric Evidence of Geometry and Cooling Behavior from the Lunar Orientale Basin Maunder Formation [#2520]

ASTEROIDS II: NEAR, FAR, WHEREVER THEY ARE [T325]

Bramble M. S. et al. [#344] Radiometric Calibration of Thermal Emission Data from the Asteroid and Lunar Environment Chamber (ALEC) [#1598]

CERES AND VESTA: FEATURES, COMPOSITION, AND EVOLUTION [T326]

Kaplan H. H. et al. [#371] New Constraints on Abundance and Composition of Organic Matter on Ceres from Laboratory Reflectance Spectra [#1155]

DIFFERENTIATED METEORITES III: HEDS [T328]

Fisher E. A. et al. [#430] Determining the Modal Mineralogy of Howardites and Brecciated Eucrites: A Combined XRD-VNIR Study and Implications for Vesta [#1650]

PLANETARY MISSION CONCEPTS I: SMALL BODIES AND SOLAR SYSTEM [T338]

Hiroi T. et al. [#608] Gaussian Deconvolution of the 3-Micron Hydration Band of Carbonaceous Chondrites for Identifying Their Parent Bodies Using a Spectrometer in Space [#1056]

Wednesday Morning, March 21, 2018

MINERALOGY OF MARS FROM ORBITAL DATA I: [W401]

8:30 a.m. Waterway Ballroom 1

9:00 a.m. Mustard J. F. and Head J. W. A Geologic Record of the First Billion Years of Mars History [#2604]

TECTONICS AND INTERIOR DYNAMICS: CRUNCHY OUTSIDE, CHEWY INSIDE [W402]

8:30 a.m. Waterway Ballroom 4

8:45 a.m. Caswell T. E. and Cooper R. F. Enhanced Dissipation in Creeping Water Ice: New Experimental Results and Implications for Icy Worlds [#1990]

TAURUS-LITTROW VALLEY I: 45 YEARS AFTER APOLLO 17 [W404]

8:20 a.m. Waterway Ballroom 6

11:30 a.m. Milliken R. E. et al. Orbital Evidence for Water in Pyroclastics at Taurus-Littrow and Other Dark Mantle Deposits on the Moon: Abundance, Resource Implications, and Future Directions [#2639]

Wednesday Afternoon, March 21, 2018

AQUEOUS ALTERATION ON MARS II: [W451]

1:30 p.m. Waterway Ballroom 1

2:30 p.m. Sheppard R. Y. et al. Signatures of Iron Cycling in a Terrestrial Redox-Stratified Lake and Implications for Gale Crater, Mars [#1471]

Thursday Morning, March 22, 2018

MERCURY: FIRST AMONG PLANETS I [R503]

8:30 a.m. Waterway Ballroom 5

9:15 a.m. Boukaré C.-E. et al. Spatial Partitioning of Sulfur in the Mercury's Crystallizing Magma Ocean [#1964]

9:30 a.m. Anzures B. A. et al. Effect of Sulfur Speciation on Chemical and Physical Properties of Heavily Reduced Mercurian Melts [#1694]

Thursday Afternoon, March 22, 2018 [R551]

LUNAR VOLCANISM I 1:30 p.m. Waterway Ballroom 1

2:30 p.m. Jawin E. R. and Head J. W. Assessing the Volcanic History of the Prinz-Harbinger Region Using Radar and Spectroscopy [#1237]

4:00 p.m. Saal A. E. et al. Boron and Lithium Contents and Isotopic Composition of the Lunar Volcanic Glasses [#2575]

4:30 p.m. Wilson L. and Head J. W. Lunar Basaltic Volcanic Eruptions: Gas Release Patterns and Variations in Lava Vesicularity: 2. Fissures, Mare Flows, and Ring Moat Dome Structure (RMDS) Morphology [#1326]

INCREDIBLE ICY SATELLITES [R557]

3:15 p.m. Montgomery Ballroom

4:30 p.m. Schultz P. H. Relating Crater Peaks, Pits, and Peak Rings on Icy and Silicate Bodies [#2748]

Thursday Evening, March 22, 2018

POSTER SESSION II 6:00 p.m. Town Center Exhibit Area

MERCURY: FIRST AMONG PLANETS II [R601]

Deutsch A. N. et al. [#13] New Evidence for Surface Water Ice in Small-Scale Cold Traps and in Three Large Craters at the North Pole Region of Mercury from the Mercury Laser Altimeter [#1537]

IMPACTS VI: MODELING [R609]

Silber E. A. et al. [#162] A Combined Modeling and Observational Study of the Effect of Impact Velocity on Production of Melt in Simple-to-Complex Lunar Craters [#1401]