Chairs: Kelsey Young
Michael Sori

8:30 a.m. Schools J. * Montési L. G. J.  
*Generation of Barriers to Melt Transport in the Martian Lithosphere [#2080]  
Melt must stop rising / But Mars still has volcanoes / Maybe tectonics?

8:45 a.m. McGovern P. J. * Kirchoff M. R. White O. L. Schenk P. M.  
*Magma Ascent Pathways Associated with Large Volcanoes on Io [#1341]  
Io’s unusual crustal stress state, due to rapid volcanic resurfacing, is adverse to further magma ascent, but adding mountain-building stress may clear pathways.

9:00 a.m. Gregg T. K. P. *  
*Oh Give Me a Home with a Resurgent Dome: Loki Patera, Io [#2517]  
Does Loki Patera, Io, contain a resurgent dome? Model results are inconclusive.

9:15 a.m. Le Corvec N. * McGovern P. J. Grosfils E. B. Galgana G. A.  
The Role of Plasticity in the Stability of Elliptical Magma Reservoirs on Venus [#1792]  
Calderas on Venus suggest for elliptical magma reservoirs. Using finite element modeling we study the role of plasticity in their stability.

9:30 a.m. Davies A. G. * de Pater I. de Kleer K. Wilson L. Head J. W. III  
Modelling the Thermal Signature of Large Eruptions on Io [#1575]  
Large voluminous eruptions on Io are a template for events that shaped many other planets. We use a sophisticated thermal model to derive eruption parameters.

9:45 a.m. Hughes S. S. * Kobs Nawotniak S. E. Borg C. Mallonee H. C. Purcell S. et al.  
Diverse Eruptions at ~2,200 Years B.P. on the Great Rift, Idaho: Inferences for Magma Dynamics Along Volcanic Rift Zones [#2841]  
Diverse lava flows erupted on the Great Rift of Idaho ~2.2 ka during a “flare-up” of activity have implications for magma dynamics along volcanic rift zones.

10:00 a.m. Qiao L. * Head J. W. Wilson L. Kreslavsky M. A. Xiao L.  
Compound Flow Fields in Southwest Mare Imbrium: Geomorphology, Source Regions, and Implications for Lunar Basin Filling [#2038]  
Detrended LOLA data reveals the presence and nature of lunar mare compound flow fields in SW Imbrium, which may represent major filling modes of lunar basins.

10:15 a.m. Rumpf M. E. * Lev E.  
Investigating the Effects of Substrate Roughness on Lava Flow Emplacement Through Analog Experiments [#2442]  
“Lava” in the lab / Substrate roughness changes flow / Let’s go look at Mars!

10:30 a.m. Dundas C. M. * Keszthelyi L. Jaeger W. L. Milazzo M. P.  
Tilted-Facet Terrain of Elysium Planitia, Mars [#2334]  
Chaotic deformation associated with young lavas may be due to invasive lava.
10:45 a.m.  Marcucci E. C. *  Hamilton C. W.  Herrick R. R.  
**Lava-Ice Interactions in Lost Jim Lava Flow, Seward Peninsula, Alaska, and Tartarus Colles Lava Flow, Elysium Planitia, Mars** [#2893]  
We use the unique Lost Jim Lava Flow in Alaska, where there is evidence of lava-ice interactions, to identify and understand similar volcanic activity on Mars.

11:00 a.m.  Jawin E. R. *  Head J. W.  Wilson L.  
**Huge Pyroclastic Cones Surrounding Cobra Head, Aristarchus Plateau: Relation to Vallis Schroteri** [#1505]  
The formation of several major volcanic features on the Aristarchus Plateau can be explained through an extended fire-fountain eruption centered on Cobra Head.

11:15 a.m.  Renggli C. J. *  King P. L.  Henley R. W.  
**Metal Transport and Deposition in Lunar Fire Fountain Eruptions** [#1760]  
Linking thermochemical evolution of a lunar volcanic gas in a fire fountain eruption with ballistic flight paths of glass beads and metal deposition.

11:30 a.m.  Weider S. Z. *  Nittler L. R.  Murchie S. L.  Peplowski P. N.  McCoy T. J.  et al.  
**Evidence from MESSENGER for Sulfur- and Carbon-Driven Explosive Volcanism on Mercury** [#1217]  
Mercury bright, “red” / Pyroclastic driven by / Sulfur, carbon loss.