Filiberto *  
**Introduction to Meeting**

Taylor G. J. *  
**[INVITED 30 MINUTES]**

*An Overview of Volatiles in Bulk Silicate Mars* [#1011]

Mars is distinctly richer in moderately volatile elements (e.g., alkalis) compared to Earth, but the planets have similar abundances of highly volatile elements. Half of the bulk inventory of incompatible volatile species is in the martian crust.

Hamilton V. E. *  
**[INVITED 30 MINUTES]**

*Outside In: Constraints on Martian Volatiles from Orbital, In Situ, and Laboratory TIR Spectroscopy* [#1029]

Although their histories may be complex, the presence, compositions, and abundances of volatiles in minerals identified on the martian surface can and should be considered as a constraint on volatiles in the martian interior.

Schwenzer S. P. *  Ott U.  
**[INVITED 30 MINUTES]**

*Noble Gases in Martian Meteorites: A Puzzle of Components, Sources, Pathways and Sinks* [#1008]

Noble gases have been measured on Mars by Viking and Curiosity, and studying them in meteorites revealed atmospheric and fractionated atmospheric signatures and possibly an inhomogeneous interior. But...terrestrial air has noble gases, too.

**BREAK**

Breuer D. *  Plesa A.-C.  Grott M.  Morschhauser A.  
**[INVITED 30 MINUTES]**

*Mantle Dynamics, Early Reservoir Formation and Degassing of the Martian Interior* [#1025]

Inefficient volcanic outgassing of the interior supports the hypothesis that rather than being warm-and-wet, the martian climate was probably cold-and-wet. The formation of a buoyant depleted mantle layer prevents efficient outgassing of water.

Chassefiere E. *  Lasue J.  Langlais B.  Quesnel Y.  
**[CONTRIBUTED 20 MINUTES]**

*Early Mars Serpentinization Derived CH$_4$ Reservoirs and H$_2$ Induced Warming* [#1001]

The early martian cryosphere has potentiality trapped all the CH$_4$ released by early serpentinization, which could explain sporadic release of CH$_4$ today. The H$_2$ released may have increased surface temperature above 0°C during $2 \times 10^7$ yr.

Elrod M. K. *  Jakowski B.  MAVEN Team  
**[INVITED 30 MINUTES]**

*Mars Atmosphere and Volatile EvolutioN Mission (MAVEN)* [#1019]

MAVEN entered Mars atmosphere September 21, 2014 to study to upper atmosphere of Mars. With a brief encounter with comet Siding Spring occurring just after arrival, this mission provides axing opportunities to study the volatiles of Mars in a new way.

**DISCUSSION**