

Wednesday, March 18, 2015

[W353]

SPECIAL SESSION: EARLY RESULTS FROM THE MAVEN MISSION II

1:30 p.m. Waterway Ballroom 5

Chairs: Richard Zurek
Shannon Curry

- 1:30 p.m. Chaffin M. S. * Chaufray J. Y. Deighan J. M. Schneider N. M. McClintock W. E. et al.
[H Escape at the Present Epoch](#) [#2190]
The first MAVEN observations of the extended H corona of Mars will be presented and discussed.
- 1:45 p.m. Clarke J. T. * Matta M. McClintock W. Schneider N. Deighan J. et al.
[Early Results from the MAVEN IUVS Echelle Channel](#) [#2313]
The MAVEN IUVS echelle channel is measuring the D/H ratio and O line strengths from the upper atmosphere of Mars. First results will be presented.
- 2:00 p.m. Lillis R. J. * Deighan J. L. Fox J. L. Bougher S. W. Lee Y. et al.
[Photochemical Escape of Oxygen from the Martian Atmosphere: First Results from MAVEN](#) [#1568]
Photochemical escape of oxygen is expected to be a significant channel for atmospheric escape. MAVEN's first measurements of escape fluxes are presented.
- 2:15 p.m. Leblanc F. * Lillis R. Curry S. Luhmann J. Modolo R. et al.
[MAVEN: Atmospheric Loss Induced by Sputtering](#) [#1363]
Based on MAVEN observations, we will describe our understanding of the sputtering of Mars' atmosphere and how it might contribute to its atmospheric loss.
- 2:30 p.m. Bougher S. W. * Tolson R. H. Mahaffy P. R. Johnston T. E. Olsen K. et al.
[Trends in Mars Thermospheric Density and Temperature Structure Obtained from MAVEN ACC/RW and NGIMS Datasets: Interpretation Using Global Models](#) [#2062]
MAVEN first results include in situ sampling of the Mars thermospheric structure at northern mid-to-high latitudes from both NGIMS and ACC/RW measurements.
- 2:45 p.m. Halekas J. S. * McFadden J. P. Luhmann J. G. Lillis R. J.
[Solar Wind or Houdini? Penetrating Protons Observed at Low Altitude by the MAVEN Solar Wind Ion Analyzer](#) [#1381]
We present MAVEN observations of a newly discovered population of solar wind protons that penetrate to low altitude by interacting with Mars' atmosphere.
- 3:00 p.m. Ma Y. J. Russell C. T. * Nagy A. F. Toth G. Halekas J. S. et al.
[MHD Model Results of Solar Wind Plasma Interaction with Mars and Comparison with MAVEN Observations](#) [#1202]
This study investigates in detail how plasma properties in Mars ionosphere are influenced locally by the crustal field and its rotation.
- 3:15 p.m. Curry S. M. * Luhmann J. G. Dong C. F. Leblanc F. Modolo R. et al.
[MAVEN Data-Model Comparisons of Planetary Ions](#) [#2389]
We present comparisons of planetary pickup ions at Mars with MAVEN data to both validate the models and better constrain global atmospheric loss rates at Mars.
- 3:30 p.m. Crismani M. * Schneider N. Deigan J. Stewart I. Combi M. et al.
[Ultraviolet Observations of the Hydrogen Coma of Comet Siding Spring \(C/2013 A1\) by MAVEN/IUVS](#) [#2462]
After its arrival at Mars, MAVEN was serendipitously positioned to study the anticipated planet-grazing Comet C/2013 A1 and made useful scientific observations.

- 3:45 p.m. Schneider N. M. * Stewart A. I. F. McClintock W. E. Mahaffy P. R. Benna M. et al.
[MAVEN IUVS Observations of the Aftermath of Comet Siding Spring's Meteor Shower](#) [#2804]
The MAVEN spacecraft observed intense emission from vaporized dust in Mars' atmosphere following an intense meteor storm caused by Comet Siding Spring.
- 4:00 p.m. Jolitz R. D. * Lillis R. J. Curry S. M. Brain D. A. Larson D. L. et al.
[Atmospheric Effects of Energetic Particle Events Measured by MAVEN](#) [#2657]
We calculate effects on the martian upper atmosphere of solar energetic particle precipitation measured by the MAVEN SEP instrument.
- 4:15 p.m. DiBraccio G. A. * Espley J. R. Connerney J. E. P. Brain D. A. Halekas J. S. et al.
[MAVEN Observations of Magnetic Reconnection on the Dayside Martian Magnetosphere](#) [#2125]
Using MAVEN data, we investigate dayside reconnection by examining the interaction of the IMF with the induced ionospheric magnetic fields and crustal fields.
- 4:30 p.m. Lisse C. M. * CIOC Team
[Results from the CIOC Comet Siding Spring at Mars Observing Campaign](#) [#2377]
We present the CIOC-driven observing results, initiatives tried, and lessons learned for C/2013 A1 (Siding Spring) during its 2014 close flyby of Mars.