Wednesday, October 28, 2015
EQUATORIAL II
8:00 a.m. Lecture Hall

8:00 a.m. Mitchell J. L. * Christensen P. R. PhD
Equatorial Opportunities for Humans on Mars **[#1023]**
The equatorial exploration zone presented in this abstract includes both geologic and resource-based sites of interest. Proximity to recurring slope lineae, chloride deposits, and representation of major geologic processes are included in this EZ.

8:15 a.m. Calef F. J. III * Archer D. Clark B. Day M. Goertz W. Martin-Torres J. Zorzano Mier M.
Assessing Gale Crater as a Landing Site for the First Human Mission to Mars **[#1020]**
We've assessed Gale crater's potential as the first human landing site. Besides being a well-characterized and benign landing site for EDL, it contains many science ROIs and identifiable ISRU ROIs meeting most if not all requirements proposed.

8:30 a.m. Yun P. *
NASA Landing Site/Exploration Zone Proposal for Human Missions **[#1022]**
Gale Crater meets engineering constraints and has a great potential for past and present habitability; its geological diversity meets science site criteria in astrobiology, atmospheric science, and geoscience.

8:45 a.m. Montaño S. * Johnstone S. Lanza N. Delapp D.
Ground Truth Assessment of the Gale Crater Region Using Mars Science Laboratory Data for Characterization of Potential Human Mission Landing Site and In Situ Resource Utilization **[#1040]**
We discuss the benefits of Gale crater as an exploration zone for a future crewed Mars mission, using MSL data to describe science and resource regions of interest as well as engineering constraints.

9:00 a.m. INTEGRATING DISCUSSION

9:20 a.m. *Break*

9:35 a.m. Wilkinson M. J. McGovern P. J. *
Sinus Meridiani Landing Site for Human Exploration —- A Mesoscale Fluvial System **[#1042]**
SW Sinus Meridiani is proposed as an EZ as seen through the lens of the still poorly recognized large fluvial fan model. Hematite distribution, regional and Miyamoto Crater sedimentary stacks, sediment inundation of craters, and the rover traverse path are suggested ROIs.

9:50 a.m. Clarke J. D. Willson D. Smith H. D. *
First Landing: Southern Edge of Meridiani Planum **[#1057]**
The Endeavour Crater Region is well characterized by the Opportunity rover with good attributes for a first landing site, access to water and mineral resources, and has Noachian, Hesperian, and Amazonian units for science investigations.

10:05 a.m. Cohen B. A. * Seibert M. A.
The Land of Opportunity: Human Return to Meridiani Planum **[#1030]**
Meridiani Planum possesses extremely safe landing characteristics, extensive areas with high trafficability, compelling science motivations to decipher the climatic and hydrologic evolution of Mars, and potential for resource extraction.

10:20 a.m. Longo A. Z. *
A Landing Site for Human Missions to Mars in Gusev Crater **[#1008]**
Gusev Crater is the ideal location for a manned mission to Mars because of Spirit ground truth, a rich diversity of targets for exploration, and resources to sustain a human presence on the surface of Mars without jeopardizing planetary protection.

10:35 a.m. INTEGRATING DISCUSSION

10:55 a.m. *Break*

11:10 a.m. Rice J. W. Jr. * Ruff S. W. Longo A. Z.
Manned Mars Mission Exploration Zone: Gusev Crater-Apollinaris Sulci **[#1046]**
Our proposed 200 km diameter Exploration Zone includes portions of the floor and NE rim of Gusev crater and distal flanks of Apollinarus Mons.

11:25 a.m. Kerber L. * Mueller R. P. Sibille L. Abbud-Madrid A. Bertrand T. Stack K. M. Nicholas A. K. Parcheta C. E. Piqueux S. Daubar I. J. Malaska M. J. Ashley J. W. Diniega S. Dickson J. L. Fassett C. I.
A Human Landing Site at Apollinaris Sulci: Life Inside a Yardang **[#1043]**
An Exploration Zone centered on Apollinaris Sulci would offer a variety of diverse science targets and a unique resource in the form of the nearby Medusae Fossae Formation, which could provide shelter and large amounts of building material.

11:40 a.m. Yakovlev V. V. *
Hills Zephyria Planum — A Source of Deep Resources **[#1016]**
It is assumed to have access to deep water resources, minerals, gas and heat contained in the large injection structures in the implementation of the first humanitarian mission to the hills Zephyria Planum.

11:55 a.m. Davila A. Fairén A. G. Rodríguez A. P. Schulze-Makuch D. * Rask J. Zavaleta J.
The Hebrus Valles Exploration Zone: Access to the Martian Surface and Subsurface **[#1012]**
The Hebrus Valles EZ represents a diverse setting with multiple geological contacts and layers, possible remnant water ice and protected subsurface environments, which could be critical for the establishment of long-term human settlements.

12:10 p.m. INTEGRATING DISCUSSION

12:25 p.m. *Lunch*