

Thursday, October 29, 2015
HIGH-LATITUDE II
2:15 p.m. Lecture Hall

- 2:15 p.m. Barker D. C. * James G. Chamitoff G. Clifford S.
[Site Selection for the First Sustainable Mars Base](#) [#1002]
Water is the most valuable resource needed for human habitability and its location and ease of extraction should be the main constraint for defining a sustainable and growing human settlement on Mars followed by exploration and scientific objectives.
- 2:30 p.m. Viola D. * McEwen A. S. Dundas C. M.
[Mid-Latitude Ice as a Target for Human Exploration, Astrobiology, and In-Situ Resource Utilization](#) [#1011]
We propose two EZs in the northern mid-latitudes of Mars, where near-surface excess ice offers a readily-available source of water.
- 2:45 p.m. Laine P. E. *
[Exploration Zone in Newton Crater](#) [#1015]
Newton is a large crater (300 km) located in Terra Sirenum. This region is heavily cratered, preserves crustal magnetism, and has ground ice present. Within this EZ there are many potential science and resource ROIs, e.g. indicatives of past water.
- 3:00 p.m. Gallegos Z. E. * Newsom H. E.
[A Human Exploration Zone in the Protonilus Mensae Region of Mars](#) [#1053]
This abstract highlights an area in the Protonilus Mensae region of Mars. Noachian through Amazonian materials are available for sampling in the EZ and there are abundant resources for use in civil engineering.
- 3:15 p.m. INTEGRATING DISCUSSION
- 3:35 p.m. *Break*
- 3:50 p.m. Stoker C. R. * Heldmann J.
[Midlatitude Ice-Rich Ground on Mars: An Important Target for Science and In Situ Resource Utilization on Human Missions](#) [#1018]
Midlatitude ice-rich ground on Mars is an attractive target to search for evidence of modern life, study Mars climate evolution, and for In Situ Resource Utilization on human missions.
- 4:05 p.m. Westenberg A. A. M.A. * Zucker R. A. J.D.
[That First Step Should Resonate for Millennia to Come](#) [#1029]
The first human landing site on Mars should be selected based on its intrinsic historical significance. Picking a site named after a scientist carries meaning beyond the moment of first landing as it honors those on whose shoulders we stand today.
- 4:20 p.m. Hamilton J. C. * Lundblad S. Clark D. L. Purves N. G. Milovsoroff C. T. Thomas N.
[Ausonia Cavus and Kasei Valles: Complementary Exploration Zone Sites for Biology, Geology and ISRU](#) [#1045]
Two complementary EZs are proposed that are rich in geologic history and exhibit water evidence for astrobiology. Both sit midway down flow features in erosional valley networks. These are Ausonia Cavus (paleolake) and Kasei Valles (flow channel).
- 4:35 p.m. INTEGRATING DISCUSSION
- 4:55 p.m. DAILY WRAP UP