



# 6th International Conference on Mars Polar Science and Exploration

September 5–9, 2016 • University of Iceland • Reykjavik, Iceland

Held at University of Iceland in Reykjavik, September 5-9

- 102 attendees from 11 countries
- 22 student presenters (12 students with financial support)
- 16 oral technical sessions followed by discussion.
- 3 simultaneous poster sessions
- 9 institutional sponsors
- 16 discussion sessions with widespread engagement
- 7 field trip options, including 3 options for mid-conference
- High energy level and active participation
- Convened by Isaac B Smith and Thorsteinn Thorsteinsson

## Technical Sessions

- Present Polar Atmosphere: Dynamics
- Present Polar Atmosphere: H<sub>2</sub>O and CO<sub>2</sub>
- Volatiles and Diurnal or Seasonal Cycles
- Surface Activity
  - 1.CO<sub>2</sub> ice as a geomorphologic agent
  - 2.Surface Expression of Seasonal Processes
- Terrestrial Analogs
- The Martian Climate Record
  - 1.Polar Cap Edition
  - 2.Ancient and Modern Ground Ice
- Polar Geology
  - 1.Glaciers and Ground Ice
  - 2.Polar Geochemistry and Mineralogy
  - 3.Polar Structure
- Glaciology and the Physics of Ice
- Future Exploration of Mars Polar Regions

## Major Questions Resulting from Discussions

no priority order, put together by designated synthesis team

Polar Atmosphere: What are the dynamical and physical atmospheric processes at various spatial and temporal scales in the polar regions, and how do they contribute to the global cycle of volatiles and dust?

Polar Layered Deposits: What do physical characteristics of the Martian PLD reveal about their formation and evolution?

Past Climate: How has the Martian [polar] climate evolved through geologic history, and what record exists of past-states?

Non-polar ice: What is the history and present state of the mid- and low-latitude volatile reservoirs?

Present day surface activity: What are the roles of volatiles and dust in surface processes actively shaping the present polar regions of Mars?

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Askja Caldera, northern pre-conference field trip