**Thursday, March 26, 2009**
**POSTER SESSION II: COMPARATIVE PLANETOLOGY**
**6:30 p.m. Town Center Exhibit Area**

Sharkov E. Bogatikov O.
*Irreversible Evolution of the Terrestrial Planets: Geological and Petrological Data* **[#1065]**
All terrestrial planetary bodies have been self-developed systems, evolved on the close scenario, which provides cardinal change of tectonomagmatic processes at the middle stages of their evolution; except the Earth, they are "dead" bodies now.

Stoddard P. R. Jurdy D. M.
*Topographic Comparisons of Uplift Features on Venus and Earth: Implications for Venus Tectonics* **[#2236]**
Topographic profiles of regiones and rifts on Venus are compared to hotspots and mid-ocean spreading centers on Earth. Principal component analysis shows that the continental Yellowstone hotpot corresponds well with Venus regions.

Litherland M. M. McGovern P. J.
*Effects of Planetary Radius on Lithospheric Stresses and Magma Ascent on the Terrestrial Planets* **[#2201]**
We model how varying planetary curvature affects the lithospheric stress beneath a load. We then examine how this can assist or inhibit magma ascent beneath volcanoes and basins on differently sized planets.

Baptista A. R. Craddock R. A. Mangold N.
*Small Martian Shield Volcanoes and Terrestrial Analogues* **[#2102]**
We are conducting field studies in Hawaii and in Iceland to understand the formation of parasitic shield volcanoes and their related lava flows. The rheological properties of Mars Syria Planum small shields volcanoes make them a good analog.

Gadányi P. Gucsik A. Bérczi Sz.
*Pseudokarstic Subsidences Induced by Subsurface Melting of Tephra-covered Firn — Analogues for Martian Subsidences in the Dyngjufjöll Massif, Iceland* **[#2353]**
The subsidences from the selected area of Iceland can aid to understand more about the newly discovered ice shields on Mars and their morphological features and climatic environments.

Tretyakov V. I. Kozyrev A. S. Litvak M. L. Malakhov A. V. Mitrofanov I. G. Mokrousov M. I. Sanin A. B. Vostrukhin A. A.
*Comparison of Neutron Environment and Neutron Component of Radiation Doze for Space around Earth and Mars from Data of Instruments HEND/MarsOdyssey and BTN/ISS* **[#1292]**
Data from two similar instruments — HEND onboard NASA's Mars Odyssey and BTN onboard International Space Station — allows us to compare the neutron environment in the space near Mars and Earth and estimate the neutron dose for interplanetary flights.

Schmedemann N. Neukum G. Denk T. Wagner R.
*Impact Crater Size-Frequency Distribution (SFD) on Saturnian Satellites and Comparison with Other Solar-System Bodies* **[#1941]**
Our research shows high similarities of impact crater-SFDs between the inner solar-system bodies, the saturnian satellites and the asteroid body-SFD.

Garry W. B. Zimbelman J. R. Bleacher J. E. Crumpler L. S.
*Topography and Inflation Features of the 1859 Mauna Loa Lava Flow, Hawai'i: Applications to Inflated Flows on Mars* **[#1200]**
Topography and inflation features from the distal end of the 1859 lava flow on Mauna Loa volcano Hawai'i will be compared to possible inflated flows on Mars.

Bleacher J. E. Garry W. B. Zimbelman J. R. Richardson P. W.
*Field Observations of Rootless Vents over the Pohue Bay Lava Tube, Hawai'i: Comparisons with Olympus Mons Lava Fans, Mars* **[#1980]**
Field studies of rootless vents over lava tubes on Hawai'i suggest that most Olympus Mons lava fans are also rootless eruption points. Rift zones, if present, are likely responsible for a smaller population of flank fans.

Shockey K. M. Gregg T. K. P.
*The Spatial Relationship Within Fields of Shield Volcanoes* **[#2056]**
We statistically examine the spatial distribution of volcanic edifices within fields on the terrestrial planets.