# PROGRAM 39th Lunar and Planetary Science Conference March 10–14, 2008

## Revised February 19 to reflect revisions to NASA Headquarters Events

To view the full listing for a session, use the hand tool of your Acrobat Reader to click on the name of the session. When the session listing appears, you can click on a title to view the abstract for that presentation.

Unless LPI is specifically included in the room name, all locations listed are at South Shore Harbour. An asterisk apearing in the program indicates the speaker.

## Sunday, March 9

8:30 a.m. - 3:00 p.m.

LPI Berkner Rooms LPI Education/Public Outreach Workshop

"Reaching the Moon"

9:00 a.m. - 5:00 p.m.

Oasis Room NASA Proposal Writing Workshop

## Sunday Evening, March 9, 5:00 p.m.

LPI Hess Room Registration

LPI Great Room Reception

LPI Berkner Rooms Education and Public Outreach Program and Product Displays

#### Monday Morning, March 10, 8:30 a.m.

Crystal Ballroom A SPECIAL SESSION: MESSENGER at Mercury I

Crystal Ballroom B Mars: Pingos, Polygons, and Other Puzzles

Marina Plaza Ballroom Solar Wind and Genesis: Measurements and Interpretation

Amphitheater Asteroids, Comets, and Small Bodies

## Monday, March 10, 12:10 - 1:30 p.m. (note change in date)

Crystal Ballroom A NASA Headquarters R&A Town Hall with Yvonne Pendleton,

Senior Advisor for R&A

## Monday Afternoon, March 10, 1:30 p.m.

Crystal Ballroom A PLENARY SESSION: Masursky Lecture by Dr. Robert Pepin

and Award Presentations

#### Monday Afternoon, March 10, 2:30 p.m.

Crystal Ballroom A SPECIAL SESSION: MESSENGER at Mercury II

Crystal Ballroom B Mars: Ice On the Ground and In the Ground

Marina Plaza Ballroom SPECIAL SESSION: Results from Kaguya (SELENE) Mission to the Moon

Amphitheater Outer Planet Satellites: Not Titan, Not Enceladus

## Monday Evening, March 10, 5:30 p.m.

Crystal Ballroom A NASA Headquarters SMD/ESMD Briefing with Michael Griffin, NASA Administrator

immediately followed by

Marina Plaza Ballroom Student/Scientist Reception

#### Tuesday Morning, March 11, 8:30 a.m.

Crystal Ballroom A SPECIAL SESSION: Lunar Science: Past, Present, and Future I

Crystal Ballroom B Mars: North Pole, South Pole — Structure and Evolution

Marina Plaza Ballroom Refractory Inclusions

Amphitheater Impact Events: Modeling, Experiments, and Observations I

#### Tuesday, March 11, Noon - 1:30 p.m.

Harbour Club Informal Planetary Research and Analysis (R&A) Reception

with NASA Headquarters SMD Program Officers

#### Tuesday Afternoon, March 11, 1:30 p.m.

Crystal Ballroom A SPECIAL SESSION: Lunar Science: Past, Present and Future II

Crystal Ballroom B Mars Sedimentary Processes from Victoria Crater to the Columbia Hills

Marina Plaza Ballroom Formation and Alteration of Carbonaceous Chondrites

Amphitheater Impact Events: Modeling, Experiments and Observations II

## Tuesday Evening, March 11, 6:30 p.m.

Fitness Center POSTER SESSION I

Education and Public Outreach Programs
Early Solar System and Planet Formation

Solar Wind and Genesis

Asteroids, Comets, and Small Bodies

Carbonaceous Chondrites

Chondrules and Chondrule Formation

Chondrites

Refractory Inclusions
Organics in Chondrites

Meteorites: Techniques, Experiments, and Physical Properties

MESSENGER and Mercury

Lunar Science Present: Kaguya (SELENE) Results

Lunar Remote Sensing: Basins and Mapping of Geology and Geochemistry

Lunar Science: Dust and Ice

Lunar Science: Missions and Planning Mars: Layered, Icy, and Polygonal Mars Stratigraphy and Sedimentology

Mars (Peri)Glacial

Mars Polar (and Vast)

Mars, You are Here: Landing Sites and Imagery

Mars Volcanics and Magmas

Mars Atmosphere

Impact Events: Modeling, Experiments, and Observations III

Ice is Nice: Mostly Outer Planet Satellites

Galilean Satellites
The Big Giant Planets

Astrobiology

In Situ Instrumentation

Rocket Scientist's Toolbox I: Mission Science and Operations

Spacecraft Missions

## Wednesday Morning, March 12, 8:30 a.m.

Crystal Ballroom A New Achondrite GRA 06128/GRA 06129 — Origins Unknown

**10:00 a.m.** The Science Behind Lunar Missions

Crystal Ballroom B Mars Volcanics and Tectonics

Marina Plaza Ballroom From Dust to Planets (Planetary Formation and Planetesimals):

When, Where, and Kaboom!

Amphitheater Astrobiology: Biosignatures, Impacts, Habitability

## Wednesday, March 12, 12:10 - 1:30 p.m. (note change in event)

Crystal Ballroom A NASA Headquarters SMD Briefing with Alan Stern,

Associate Administrator, Science Mission Directorate

#### Wednesday Afternoon, March 12, 1:30 p.m.

Crystal Ballroom A Excavating a Comet

Crystal Ballroom B Mars Interior Dynamics to Exterior Impacts

Marina Plaza Ballroom Achondrites

Amphitheater Lunar Remote Sensing

## Wednesday Evening, March 12, 5:30 p.m. (note change in speaker)

Crystal Ballroom A NASA Headquarters SMD/ESMD Briefing with Jim Green,

Director of the Planetary Science Division, Science Mission Directorate

#### Thursday Morning, March 13, 8:30 a.m.

Crystal Ballroom A Mars Aeolian Processes and Gully Formation Mechanisms

Crystal Ballroom B Solar Nebula Shake and Bake: Mixing and Isotopes

Marina Plaza Ballroom Lunar Geophysics

Amphitheater Meteorites from Mars: Shergottite and Nakhlite Invasion

## Thursday, March 13, 12:10 – 1:30 p.m. (note change in time and location)

Crystal Ballroom A Improving NASA's Announcements of Opportunity: Community Input

with Paul Hertz, SMD Senior Advisor for Science Process and Ethics

## Thursday Afternoon, March 13, 1:30 p.m.

Crystal Ballroom A Mars Fluvial Geomorphology

Crystal Ballroom B Chondrules and Chondrule Formation

Marina Plaza Ballroom Lunar Samples: Chronology, Geochemistry, and Petrology

Amphitheater Enceladus

**3:30 pm** Venus: Resurfacing and Topography (with Pancakes!)

## Thursday Evening, March 13, 5:30 p.m.

Marina Plaza Ballroom Overview of the Lunar Reconnaissance Orbiter Mission

## Thursday Evening, March 13, 6:30 p.m.

Fitness Center POSTER SESSION II

Presolar Grains
Micrometeorites

Condensation-Evaporation: Stardust Ties

Comet Dust

Comparative Planetology
Planetary Differentiation

Lunar Meteorites

Nonchondritic Meteorites

Martian Meteorites

Apollo Samples and Lunar Interior

Lunar Geophysics

Lunar Science: Geophysics, Surface Science, and Extralunar Components

Mars, Remotely

Mars Orbital Data — Methods and Interpretation

Mars Tectonics and Dynamics

Mars Craters: Tiny to Humongous

Mars Sedimentary Mineralogy

Martian Gullies and Slope Streaks

Mars Fluvial Geomorphology

Mars Aeolian Processes

Mars Data and Missions

Venus Mapping, Modeling, and Data Analysis

Titan

## Thursday Evening, March 13, 6:30 p.m. (continued)

Fitness Center POSTER SESSION II (continued)

Icy Dwarf Satellites

Rocket Scientist's Toolbox II: In Situ Analysis

Remote Sensing Approaches, Advances, and Applications

Analogs: Sulfates — Earth and Lab to Mars Analogs: Remote Sensing and Spectroscopy

Analogs: Methods and Instruments

Analogs: Weird Places!

## Friday Morning, March 14, 8:30 a.m.

Crystal Ballroom A Mars Sulfates, Phyllosilicates, and Their Aqueous Sources

Crystal Ballroom B Ordinary and Enstatite Chondrites

**10:30 a.m.** Impact Calibration and Effects

Marina Plaza Ballroom Comparative Planetology

Amphitheater Analogs: Environments and Materials

## Friday Afternoon, March 14, 1:30 p.m.

Crystal Ballroom A Mars: The Orbital View of Sediments and Aqueous Mineralogy

Crystal Ballroom B Planetary Differentiation

Marina Plaza Ballroom Titan

Amphitheater Presolar Grains: Still More Isotopes Out of This World

## **Print Only**

Early Solar System

Solar Wind

IDPs, Presolar/Solar Grains, Stardust

Comets, Asteroids, and Phobos

Venus Mercury Moon

Meteorites

## **Print Only (continued)**

Mars

Astrobiology

Impacts

Outer Planets, Satellites, and Rings

Support for Mission Operations

Analogs

Education and Public Outreach