



**CORRECTION: PLANETARY SCIENCES SECTION NEWSLETTER #51 (July 2013)**

*Dear Planetary Sciences members,*

*Please note that the hyperlink in item 3 has been modified (Sequester effects on travel to 2013 AGU Fall Meeting and other conferences) as well as to submit content to Nathan Bridges for future Planetary Sciences section newsletters. We apologize for any inconvenience this may have caused and look forward to your feedback.*

*Best regards,*

*William McKinnon*

*AGU Section President, Planetary Sciences*

- 1) Planetary Science Section Awards and Named Lectures for the 2013 AGU Fall Meeting
- 2) 2013 AGU Union Honors Announced
- 3) Sequester effects on travel to 2013 AGU Fall Meeting and Other Conferences
- 4) Planetary Science Sessions at 2013 AGU Fall Meeting
- 5) Lunar Planetary Institute's *Planetary News*
- 6) Upcoming Meetings and Workshops
- 6a) Workshop on Planetesimal Formation and Differentiation
- 6b) Training Opportunity: Photogrammetric Processing of Planetary Stereo Imagery
- 7) AGU Fall Meeting Session on the Shape, Internal Structure, Gravity, and Winds of Jupiter and Saturn

-----  
**1) Planetary Sciences Section Awards and Named Lectures for the 2013 AGU Fall Meeting**

The Planetary Sciences (PS) Section is extremely pleased to announce the following:

1. The 2013 Whipple Award for "outstanding contributions in the field of planetary science" will be given to Professor Harry "Hap" McSween of the University of Tennessee. His award will be accompanied by the Whipple Lecture. Congratulations to Hap!
2. The 2013 Greeley Award for "significant early career contributions to planetary science" will be given to Professor Jonathan L. Mitchell of the University of California at Los Angeles. Congratulations to Jonathan!
3. The Shoemaker Lecture, part of the AGU Bowie series, will be delivered by Dr. Michael H. Carr of the United States Geological Survey.
4. The Sagan Lecture, co-sponsored by the Planetary Sciences and Biogeosciences sections, will be given by Dr. David H. Grinspoon of the Denver Museum of Nature and Science.

-----  
**2) 2013 AGU Union Honors Announced**

The Planetary Sciences Section is extremely pleased to announce the election of Catherine L. Johnson, University of British Columbia, and Keke Zhang, University of Exeter, to the [2013 Class of AGU Fellows](#). Congratulations to Catherine and Keke!

-----

### 3) Sequester Effects on Travel to 2013 AGU Fall Meeting and Other Conferences

The Federal sequester has adversely affected the NASA budget. Travel restrictions to scientific meetings by NASA civil service personnel and contractors has been the most immediate outcome, resulting in a significant loss in productivity and the personal interactions that are essential in our field. At the Lunar and Planetary Science Conference held in March, NASA and JPL attendance was limited to 50. Such restrictions at the 2013 AGU Fall Meeting would be severely detrimental to the meeting. The PS Section is trying to get clarification from NASA on what limitations will apply, which will be reported in a future newsletter. In the meantime, the [PS Section would appreciate hearing from any members](#) on feedback that they have received.

-----

### 4) Planetary Science Sessions at 2013 AGU Fall Meeting

Below is the list of all approved Planetary Science sessions slated for the 2013 AGU Fall Meeting. Scheduling will occur at the next Program Committee meeting in September (note that the "P" session designations are temporary and will be changed once scheduling is complete). More details can be found on the [AGU Fall Meeting Web site](#). Should you have any questions or concerns about the program, feel free to contact the PS Program Committee representatives, [Nathan Bridges](#) and [Joern Helbert](#). Based on the diversity and scope of these sessions, the 2013 AGU Fall Meeting should be a very exciting meeting.

- P001 Planetary Sciences General Contributions
- P002 Accretion, core-mantle differentiation and early planetary evolution
- P003 Atmospheric escape, upper atmospheres, ionospheres, and plasma interactions at Mars and Venus
- P004 Characterizing Small Solar System Bodies
- P005 Destination: Europa
- P006 Dynamic Mars from Long-Term Observations
- P007 Dynamic processes in Mars's atmosphere
- P008 Enceladus: Little Moon, Big Possibilities
- P009 Evolutions, interactions and origins of Outer Planet Satellites
- P010 First Results of C/2012 S1 (ISON): Comet of the Century?
- P011 Gale crater, Mars: Comparing geochemistry and geomorphology from remote sensing, in situ measurements, laboratory data, and terrestrial analogs
- P012 Geophysical Investigations of Planetary Volatiles
- P013 Geophysics of Satellites and Small Bodies

- P014 High Priority Investigations for Venus Exploration
- P015 Icy Bodies: from laboratory to space missions
- P016 Impact Cratering: Terrestrial Observations and Planetary Applications
- P017 Mars Science Laboratory: Bradbury Landing through Yellowknife Bay
- P018 Mercury after Two Years of MESSENGER Orbital Observations
- P019 Planetary Atmospheres and Evolution
- P020 Planetary Rings: Theory and Observation
- P021 Polarimetry as an invaluable tool to study the Solar System and beyond
- P022 Rapid Environmental Change and the Fate of Planetary Habitability
- P023 Rosetta, Comets, and the Origins of the Solar System
- P024 Sagan Lecture
- P025 Saturn's Northern Spring -- From Storms to Polar Vortices
- P026 Shape, Internal Structure, Gravity, and Winds of Jupiter and Saturn
- P027 Shoemaker Lecture
- P028 Solar System Dusty Plasma
- P029 The Science of Exploration as enabled by the Moon, NEAs and the moons of Mars
- P030 Thermal Modeling of Terrestrial and Planetary Bodies
- P031 Titan's Enigmatic Atmosphere and Ionosphere
- P032 Titan- A Solar System Enigma
- P033 Tracking Down Life - Star Biosignatures, Biomarker Systems or the Ensemble Cast?
- P034 Using Topography to Investigate the Evolution of Solar System Bodies
- P035 Whipple Lecture

-----

**5) Lunar and Planetary Institute's *Planetary News***

By now, most of you have probably heard of the *Planetary News* e-mail newsletter and Web site organized by the Lunar and Planetary Institute (LPI). Although the newsletter and Web site are not affiliated with AGU, the PS Executive Committee endorses them source as an effective means of staying abreast of announcements, meetings, employment opportunities, and planetary news in general. For information and to sign up for an e-mail subscription, visit the [LPI Web site](#).

-----

## 6) Upcoming Meetings and Workshops

Please check the [AGU Planetary Sciences Section Web site for a list of upcoming meetings and workshops](#). Below are two highlights that we've been asked to specifically advertise.

-----

### 6a) [Workshop on Planetesimal Formation and Differentiation](#)

Sunday, 27 October (evening reception with plenary speaker Tim McCoy)

Monday, 28 October and Tuesday, 29 October 29 (full-day sessions)

The workshop will be held at the Department of Terrestrial Magnetism, Carnegie Institution, 5241 Broad Branch Rd. N.W., Washington, D.C.

Abstract Deadline: Thursday, 29 August 2013, 5:00 p.m. (U.S. Central Daylight Time)

**Due to limited seating, [you must register in advance](#).**

Evidence from meteorites and, increasingly, from asteroids indicates that some early-forming bodies had sufficient heat to melt and differentiate into a core and mantle. Partial or complete melting can allow core formation and silicate differentiation, and can also remove volatiles. Other small bodies are apparently primitive (i.e., undifferentiated). We are now at a point where targeted interdisciplinary work can create a leap in our understanding.

- What bulk compositions and time frames of accretion would have allowed differentiation?
- Where in the solar system did these bodies originate?
- What can we observe of differentiated bodies in the asteroid belt today?
- Can we link asteroid observations to meteorites from differentiated parent bodies?
- What was the history and large-scale structure of meteorite parent bodies?

These questions bear on the critical transition from a protoplanetary disk to a solar system with rocky planets, on the habitability of those planets, and on resources in our solar system today for future space exploration.

Progress in understanding these processes will depend upon communication among the fields of meteorite and asteroid/icy body observations including space missions, theory, and modeling. The goal of this workshop is to bring together researchers on all these subjects as they pertain to differentiation, asteroid observations, and meteorite compositions.

**Some support for students is available.** Please contact [Lindy Elkins-Tanton](#).

-----

### 6b) Training Opportunity: Photogrammetric Processing of Planetary Stereo Imagery Using ISIS and SOCET SET

The Planetary Photogrammetry Guest Facility (PPGF) at the Astrogeology Science Center of the United States Geological Survey would like to announce a new Call for Participation for a training opportunity on 23–25 September 2013 on Photogrammetric Processing of Planetary Stereo Imagery using ISIS and SOCET SET<sup>®</sup>. This session has already been announced earlier and most of

the seats are already assigned. We are offering the opportunity to compliment the current list, as well as be on a waiting list in case of a cancellation. We also have initial plans to offer another training session, either in November or December 2013, on the same topic. [If these dates are more convenient for your attendance, please let us know.](#)

The training is free to participants, and will cover end-to-end, hands-on photogrammetric procedures for surface extraction from Mars Reconnaissance Orbiter HiRISE image pairs. The topics include:

- *An introduction to photogrammetric procedures and surface generation techniques;*
- *Overview of HiRISE imagery; and*
- *Workflow and data exchange between ISIS and SOCET SET.*

The hands-on training will include ISIS preprocessing, SOCET SET import of image and reference data, orientation procedures, triangulation and bundle adjustment, manual and automated surface extraction of digital terrain models (DTM), editing, and data export.

If you are interested in participating in this opportunity, please e-mail [Dr. Raad Saleh](#) with the following specific information: your name, title, affiliation, address, full contact information, and a short statement describing your interest in the training. Please note that remaining seating for this session is very limited, so please express your interest as soon as possible.

Please note the following:

1. Training will be 3 days, from Monday through Wednesday, 23–25 September 2013.
2. The training will be based exclusively on a standard set of HiRISE stereo images.
3. ISIS, SOCET SET and the Guest Facility support the use of images from several planetary cameras in addition to HiRISE. While this hands-on training will be based on HiRISE images, it would be our pleasure to advise participants on the suitability of other planetary cameras for their research projects. Furthermore, we can provide one-on-one support to producing DTMs at later days.
4. The Guest Facility has a single workstation available year-round for users who need to generate their own products. If you would like to stay longer (after this training) or come at a later date to generate your own products using the Guest Facility, please let us know the kind of images you would be using and how many DTMs you hope to produce so that we can schedule your visit accordingly.
5. For more information about the Guest Facility, and for Frequently Asked Questions, please visit the [USGS Astrogeology Science Center Web site](#). Go to Downloads at the bottom of the page and follow the link "Planetary Photogrammetry Guest Facility FAQ."
6. If you are interested in ISIS training, please visit the [ISIS Workshop Web page](#).

With your participation, we look forward to realizing another successful and productive training session. In the meantime, please do not hesitate to contact Dr. Saleh directly with any questions or for further information.

Contact: [Dr. Raad Saleh](#), Training Coordinator, Planetary Photogrammetry Guest Facility

-----  
**7) AGU Fall Meeting Session on the Shape, Internal Structure, Gravity, and Winds of Jupiter and Saturn**

You are invited to submit an abstract to Session P026 "Shape, Internal Structure, Gravity, and Winds of Jupiter and Saturn" at the 2013 AGU Fall Meeting, 9–13 December 2013, in San Francisco, Calif.

**The abstract submission deadline is 6 August 2013.**

The Juno spacecraft is now on its way to Jupiter and the Cassini spacecraft will visit Saturn toward the end of its mission. One of the main scientific objectives of both missions is to understand the internal structure, gravity, and winds of Jupiter and Saturn. We welcome the submission of abstracts on the following topics:

1. Analytical or numerical models of shape and internal structure of rapidly rotating Jupiter and Saturn
2. Relationship between the shape and internal structure of Jupiter and Saturn and their external gravity fields
3. Analytical or numerical models of winds/circulations of Jupiter and Saturn, as well as their effects on the zonal gravity coefficients of Jupiter and Saturn
4. Analytical or numerical models of convection/dynamo of Jupiter and Saturn
5. Any aspects of the Juno and Cassini missions that are related to shape, internal structure, gravity, and winds of Jupiter and Saturn

[Gerald Schubert](#)

Department of Earth, Planetary and Space Sciences,  
University of California, Los Angeles, CA 90095-1567, USA

[Keke Zhang](#)

Center for Geophysical and Astrophysical Fluid Dynamics and  
Department of Mathematical Sciences, University of Exeter EX4 4QF, UK

For future newsletter items please contact:

Section Secretary [Nathan Bridges](#)