

## **OPAG Update - February 2006**

This is the first of a roughly monthly update/newsletter. This newsletter plus supplemental documents can be found on the OPAG website at <http://www.lpi.usra.edu/opag/announcements.html>

**Next OPAG meeting - Southern California Thur/Fri May 4-5th 2006**

- (1) NASA Outer Planet studies postponed
- (2) LPSC March 13-17th, 2006
- (3) Uranus Pre-Equinox Workshop
- (4) Probe workshop

Fran Bagenal, OPAG Chair

Professor of Astrophysical and Planetary Sciences  
Laboratory of Atmospheric and Space Physics  
UCB 392 University of Colorado  
Boulder CO 80309-0392  
Tel. 303 492 2598 Fax. 303 492 6946  
<http://lasp.colorado.edu/~bagenal>

=====  
NASA Outer Planet studies postponed

You have probably heard rumors of problems with NASA's budget for science. Specifics are still not available but it is clear that the studies of outer planet missions (Europa, Titan, probes, etc) that Andy Dantzler announced at the October OPAG meeting are postponed (until when? who knows). This is depressing news. But I encourage the community to keep their spirits up and to think creatively about the mission concepts for the long term. We all know we are in for a long haul. I still maintain that, apart from Europa, we are behind in thinking/developing outer solar system mission concepts. When the roller-coaster swings upwards again - as it inevitably will - we need to be ready. I am sure this will be a major topic of discussion at the May OPAG meeting and I will pass on concrete information when I have any.

In the meantime, the ESA/NASA working group studying a Europa mission had a meeting in December and continue to study a possible international collaboration. Their report is posted on the OPAG website.

Conversations with Andy Dantzler indicate that New Frontiers AO#3 is still scheduled for 2008 with an expanded scope to include on the order of 6-10 scientific targets as prioritized in the Decadal Survey.

=====  
LPSC March 13-17th, 2006

In the meantime, the Europa community is still advocating an orbiter mission. Torrence Johnson and colleagues have an abstract submitted to LPSC describing a mission concept - posted on the OPAG website. Immediately after the Galilean Satellites session at the LPSC meeting there will be a discussion entitled "Future Outer Planet Exploration." Torrence Johnson and Bill McKinnon will moderate a discussion of where to go from here.

=====  
Uranus Pre-Equinox Workshop - First Announcement

2-3 May 2006, Pasadena, CA

Purpose: To ensure a comprehensive collection of Uranus System Equinoctial observations, by gathering the community of Uranus system observers, modelers, theorists, and lab experimentalists prior to the 2007 equinox to coordinate both observations and analyses.

Who Should Attend: Those scientists planning either to make observations of the Uranus system at equinox (including the atmosphere, rings, and satellites), or to conduct theoretical and/or laboratory work specifically pertinent to the Uranus system at equinox.

Date and Location: The meeting's timing and venue, 2-3 May 2006 in Pasadena CA, were selected to dovetail with the OPAG meeting on the following two days, in order to minimize extra travel.

Next step if interested: Send email confirming your interest to Heidi B. Hammel (hbh@alum.mit.edu) with "uranus workshop" in the subject line, and please indicate in the body of the message the particular aspect(s) of the Uranus system you plan to study. A second notice (and preliminary agenda) will be distributed in late February.

Note: the primary purpose of THIS workshop is coordination and facilitation of equinox observations and analyses, not review of current science results. Some of us are considering hosting a pre-DPS workshop to focus specifically on current atmospheric studies, and similar workshops could be envisioned for other sub-fields.

=====

International Planetary Probe Workshop  
June 27-30, 2006, Pasadena, California  
<http://ippw.jpl.nasa.gov>

The next steps in the robotic exploration of the solar system involve missions to planets and satellites with significant atmospheres. The four major planets Jupiter, Saturn, Uranus and Neptune have bottomless atmospheric oceans, but Mars, Venus and Saturn's moon Titan have solid accessible surfaces. The International Planetary Probe Workshop series was established to bring together scientists, spacecraft engineers, technologists, and mission designers interested in the technological challenges and scientific opportunities involved in entry, descent and flight in these planetary atmospheres and scientific exploration of their atmospheres and surfaces.

The Fourth Workshop (IPPW-4), to be held in Pasadena in June 2006, will build upon the accomplishments of the three earlier workshops - two held in Europe (Lisbon, Portugal, 2003 and Athens, Greece, 2005) and one in the USA (NASA Ames Research Center, 2004). As with previous workshops, key objectives include fostering international involvement in planetary exploration with probes and engaging the next generation of scientists and engineers in this exciting field. For IPPW-4 we are expecting a continuing focus on Outer Planet probe missions as well as concepts for probe and aerial platform missions to Mars, Venus and Titan. There will be a session on technologies for the extreme environments experienced in entry, descent and flight at these targets. Earth entry and descent will also be featured, including data from the Stardust mission which will return a cometary sample to Earth on January 15, 2006. To accommodate additional papers, the workshop format has been changed to include parallel sessions on the third day of the workshop.

Immediately preceding the workshop on June 25-26 a two day short course will be held on In Situ Instruments for Planetary Probes and Aerial Platforms.

#### WORKSHOP GOALS

The general goals of the International Planetary Program Workshop Series are to:

- Review the state-of-the-art in science, mission design, engineering implementation and technology for the in situ robotic exploration of planets with atmospheres.
- Share ideas, mission opportunities, and emerging technologies to enable future mission success.
- Serve as a forum for initiating discussions on innovative methodologies and techniques for future missions to explore planets and satellites with atmospheres.
- Provide young scientists and engineers in the field of entry, descent, and flight in planetary atmospheres with the opportunity to learn from experienced researchers and practitioners.
- Foster international collaboration among the communities of scientists,

engineers, and mission designers interested in planetary probes.

