OPAG

San Jose, CA

February 2015



Outer Planets Assessment Group Charter

• OPAG is NASA's *community-based forum* designed to provide science input for planning and prioritizing outer planet exploration activities for the next several decades.

Long-term strategy

- Open to all interested scientists, OPAG regularly evaluates outer solar system exploration goals, objectives, investigations and required measurements on the basis of the widest possible community outreach.
 - Near-term strategy

Meeting Topics

- Updates from NASA HQ
 - General overview and good news
 - SSW Updates
 - RPS study report and reaction
- Mission Reports
 - Ongoing (New Horizons, Juno)
 - Near future (JUICE, Europa Clipper)
 - Concept studies (Discovery, New Frontier)
 - Participating scientists
- Technology Development poster session
- Five big picture science talks
 - Jeff Cuzzi, Toby Owen, Torrence Johnson, Chris McKay, Scott Gaudi
- "Articulate the future" panel discussion

Major objective for this meeting

- Work has been proceeding on the new science goals document
 - Target-by-target we have identified the most important science questions
 - But can we see the forest for the trees?
- Five luminaries in our field have been invited to describe the *most important, scientifically compelling questions* we'd like to address with exploration of the outer solar system
 - Advised not to be constrained by fiscal or political pragmatism
 - No focus on specific missions
 - No time constraints (multi-decadal OK)
 - Blue sky wish list!
- "Next generation" panel on Day 2 will react, add their own ideas, argue, agree...
 - Frame the future
- We want to articulate the big vision

Day 1

- 8:30 Welcome, Meeting objectives Candy Hansen
- 8:45 NASA HQ update Jim Green
- 9:30 Open Mic, Q&A
- 9:45 Science talk 1 Jeff Cuzzi
- 10:15 Break
- 10:35 Clipper update Barry Goldstein, Bob Pappalardo
- 11:20 NAI Europa plume workshop highlights Britney Schmidt
- 11:35 Europa plumes search update Lorenz Roth (dial-in)
- 11:50 Lunch
- 1:00 Science talk 2 There's only one Rosetta stone in the Solar System: it's in the British Museum -Toby Owen
- 1:30 New Horizons report Jeff Moore
- 2:00 R&A SSW Update Mary Voytek
- 2:30 Open Mic, Q&A
- 2:45 EXCEED Participating Scientists Pontus Brandt
- 3:00 Break
- 3:20 Science talk 3 From Powell to Pluto: Planetary Exploration in Perspective Torrence Johnson
- 3:50 Technology poster intro Pat Beauchamp
- 4:00 Technology poster session

6:00 Adjourn

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Day 2

- 8:30 JUICE update Dima Titov
- 9:00 Juno report Scott Bolton
- 9:30 Science talk 4 Organics and Life Chris McKay
- 10:00 Break
- 10:20 RPS study results Ralph McNutt
- 10:50 DOE and RPS's Alice Caponiti
- 11:20 Discussion

Future Mission Concepts

- 11:35 Io Volcano Observer (IVO) concept for Discovery 2015 Alfred McEwen
- 12:00 Lunch
- 1:15 Low-cost Sample Return from an Icy World: Enceladus' Plume Peter Tsou
- 1:40 Enceladus Life Finder: A Discovery Mission to the Outer Solar System Jonathan Lunine
- 2:05 Kuiper: A Discovery-class Observatory for Giant Planets, Satellites, and Outer Solar System Small Bodies – Jim Bell
- 2:30 Science talk 5 Exploring outer exoplanetary systems Scott Gaudi
 3:00 Break
- 3:20 Big picture science goals for the future PANEL DISCUSSION
- 4:30 open mic findings
- 5:00 Adjourn

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Outer Solar System Exploration

Worth the journey