



***Report from the Small Bodies Assessment Group (SBAG)
to the Planetary Science Subcommittee***

Tim Swindle, SBAG Chair
September 30, 2016

Last SBAG Meeting:
June 28-30, 2016: 15th SBAG Meeting, Laurel, MD



Missions

- OSIRIS-REx launch, Sept. 8 →
- Rosetta end of mission, Sept. 29
- Extended missions
 - Dawn
 - New Horizons
- In cruise phase
 - Hayabusa-2 (scheduled arrival July 2018)
- Awaiting Discovery 13 selection(s)
 - Lucy, NEOCam, Psyche would study different types of small bodies



Photo by
Vishnu
Reddy



Findings abbreviated. Full SBAG 15 findings at:
<http://www.lpi.usra.edu/sbag/findings/>

Findings

- Discovery missions
 - SBAG reiterates the importance of the Decadal Survey recommendation of a ≤ 24 month average launch cadence for Discovery missions and urges NASA to strive to achieve this Decadal Survey priority
- Asteroid Redirect Mission
 - SBAG supports the plan as presented by the ARM team to create opportunities for hosted payloads on the ARM spacecraft and to have a competitively selected Investigation Team, both of which would maximize the science return of the mission.



Findings abbreviated. Full SBAG 15 findings at:
<http://www.lpi.usra.edu/sbag/findings/>

Findings

- Deep Space Network Support for Rosetta
 - SBAG urges the DSN to consider the unique opportunity offered by the final stage of the Rosetta mission when scheduling DSN assets to support this short duration but critical time period, to maximize the science data returned from the mission
 - **Note: Rosetta did get more DSN time**
- Rosetta Data Analysis Program
 - SBAG encourages the establishment and funding of a Rosetta Data Analysis Program to be released as soon as possible, but no later than the ROSES 2017 AO
- Arecibo
 - SBAG urges NSF and NASA to continue to work together to preserve the capabilities of Arecibo at a level that reflects the scientific and security interests of the United States



Asteroid Redirect Mission

- SBAG continues to provide a connection between the small bodies community and the Asteroid Redirect Mission
- Most recently, an SBAG Special Action Team produced a report on ARM Connections to Priority Small Body Science and Exploration Goals
 - Linkages between ARM and Decadal Survey objectives and between ARM and Strategic Knowledge Gaps



SBAG Steering Committee:

- Tim Swindle (*U. Arizona*), Chair (8/16-8/19)
- Nancy Chabot (*JHU/APL*), Past Chair (8/16-8/17)
- Brent Baarbee (*NASA Goddard*), Human Exploration Lead (8/14-8/17)
- James Bauer (*JPL*) (8/14-8/17)
- Beau Bierhaus (*Lockheed Martin*) (8/14-8/17)
- Dan Britt (*U. Central Florida*) (8/14-8/17)
- Julie Castillo-Rogez (*JPL*), (8/16-8/19)
- Paul Chodas (*JPL*) Planetary Defense Lead (8/16-8/19)
- Lori Feaga (*U. Maryland*) (8/15-8/18)
- Christine Hartzell (*U. Maryland*) (8/16-8/19)
- Carolyn Mercer (*NASA Glenn*), Technology Lead (8/15-8/18)
- Angela Stickle (*JHU/APL*), Early Career Secretary (8/15-8/17)



SBAG extends beyond PSD

- Steering committee has leads from three non-science areas
 - Technology, Planetary Defense, Human Exploration
- Meetings often include a focus on a particular topic
 - June 2016 – NASA Advanced Innovation Concepts projects involving small bodies
 - January 2017 – In situ resource utilization



Future SBAG Meetings:

- **January 11-13, 2017:** 16th SBAG Meeting
University of Arizona, Tucson, AZ
- **June 13-15, 2017:** 17th SBAG Meeting
NASA Goddard Space Flight Center, Greenbelt, MD