

*The National Academies of*  
SCIENCES • ENGINEERING • MEDICINE

**SPACE STUDIES BOARD**

Fall Meeting – 173<sup>rd</sup> Meeting – November 2-4, 2016

**Beckman Center of the National Academies of Sciences, Engineering and Medicine**

Huntington Room, 100 Academy Way, Irvine CA

**DRAFT AGENDA**  
(please check for updates)

**WEDNESDAY, NOVEMBER 2, 2016**  
**MORNING SESSIONS**

*Breakfast available from 7:30 am at the Beckman Center  
Carpool leaves hotel lobby 7:15am*

**EXECUTIVE SESSION (SSB, ESSC, & STANDING COMMITTEE MEMBERS ONLY)**

8:30 am Board Discussions

10:00 am **BREAK**

**OPEN SESSION**  
**Standing Committee Reports**

10:15 am Welcome and Introduction of Members and Attendees *David Spergel, SSB Chair*

10:20 am Cttee on Astronomy and Astrophysics *Marcia Rieke, CAA Co-Chair*

10:40 am Cttee on Astrobiology and Planetary Science *Phil Christensen, CAPS Co-Chair  
(by WebEx)*

10:50 am Cttee on Earth Science and Applications from Space *Michael King, CESAS Co-Chair*

11:00 am Cttee on Solar and Space Physics *Todd Hoeksema, CSSP Co-Chair*

11:10 am Cttee on Biological and Physical Sciences in Space *Rob Ferl, CBPSS Co-Chair*

11:20 am Discussion of Issues Raised by the Standing Committees *All*

11:30 am Plans for '17 NRC Space Science Week and New Discipline Cttees – Including Approaches to Reports *Michael Moloney, SSB Director*

11:55 am Summary of Discussion & Future Actions *David Spergel, SSB Chair*

12:00 pm **LUNCH**

**COSPAR and International Activities**

1:00 pm Update on COSPAR 2018 and Other COSPAR Activities  
(Greg Vane 10 minutes & David Smith 10 minutes) *Gregg Vane, '18 LOC  
David Smith, US COSPAR E/Sec*

1:20 pm Update from ESSC *Athena Coustenis, ESSC Chair*

**WEDNESDAY, NOVEMBER 2, 2016**

**AFTERNOON SESSION CONTINUES**

**OPEN SESSION**  
**Report on SMD**

2:00 pm	Status Report from SMD <ul style="list-style-type: none"><li>• Impact of Recent SSB Reports</li><li>• Program and Policy Challenges</li><li>• Where might the Board focus its efforts</li></ul> <p>Future Workshop and Study Topics</p>	<i>Thomas Zurbuchen, NASA (By Video)</i>
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2:45 PM	Discussion of Issues Raised by Dr. Zurbuchen with Board Members	
3:40 pm	<i>BREAK</i>	

**OPEN SESSION**  
**Current and Future Issues and Activities**

4:00 pm	Report Briefing on <i>Extending Science</i> —NASA's Space Science Mission Extensions & the Senior Review Process (Presentation 25 minutes & Discussion 10 minutes)	<i>Vicky Hamilton &amp; Harvey Tananbaum, Cttee Co-Chairs (Harvey by WebEx)</i>
4:35 pm	Report Briefing on <i>New Worlds, New Horizons</i> : A Midterm Assessment (Presentation 25 minutes & Discussion 10 minutes)	<i>TBC</i>
5:15 pm	Reminder of the case for an introduction to a study on: <b>An Open Code Future for Space Science</b>	<i>David Spergel, SSB Chair (Thomas Zurbuchen to join by phone)</i>
5:30 pm	Discussion	<i>All</i>
5:45 pm	Summary of the Discussion	<i>David Spergel, SSB Chair</i>
5:50 pm	General Discussion by All of Today's Topics	<i>David Spergel, SSB Chair</i>

**SSB ESSC & STANDING COMMITTEE MEMBERS AND INVITED GUESTS ONLY**

6:00 pm	Reception – Beckman Center Patio	
6:45 pm	Dinner – Beckman Center Dining Room (Dinner for Board Members and Invited Guests – Adjourn ~8:30pm)	

**THURSDAY, NOVEMBER 3, 2016**

*Breakfast available from 7:30 am at the Beckman Center  
Carpool leaves hotel lobby 7:15am*

<b>OPEN SESSION</b>		
<b>Focus Session on Planning for May '17 Joint Symposium on Civil Space Policy</b>		
8:30 am	Welcome and Overview of Today's Agenda	<i>David Spergel, SSB Chair</i>
8:40 am	Presentation on Outline of Symposium Planning	<i>Michael Moloney, SSB Dir</i>
9:00 am	Discussion	<i>All</i>
9:45 am	Summary of the Discussion	<i>David Spergel, SSB Chair</i>
9:50 am	<i>BREAK</i>	
<b>OPEN SESSION</b>		
<b>Current and Future Issues and Activities</b>		
10:10 am	Overview of Topic and Session on: <b>Setting a Research Agenda for Space Weather</b>	<i>Sarah Gibson, Moderator</i>
10:15 am	Outcomes from Recent CSSP and XCOM Discussions – Including a Strawman Statement of Task for a new study	<i>Todd Hoeksema, CSSP Co-Chair</i>
11:00 am	Discussions Continue	<i>All</i>
11:50 pm	Summary of the Discussion	<i>Sarah Gibson, Moderator</i>
12:00 pm	<i>LUNCH</i>	
1:15 pm	Status of Planning for the <b>2016 SSB Workshop</b> <b>Searching for Life Across Space and Time</b> (Presentation 15 minutes & Discussion 15 minutes)	<i>James Kasting, Org. Cttee Chair (By WebEx)</i>
<b>OPEN SESSION</b>		
<b>Focus Session on Mars Exploration – Plans for Red Dragon</b>		
1:45 pm	SpaceX and Plans for Red Dragon Missions to Mars	<i>Joshua Brost, SpaceX</i>
<b>OPEN SESSION</b>		
<b>Focus Session on Integrating Across the Disciplines</b>		
2:30 pm	Overview of Topic and Session	<i>David Spergel, Chair</i>
2:35 pm	The Interconnectivity or Interdependence of missions across the SMD disciplines: Perspectives from Astrobiology and Astrophysics  (20 mins each)	<i>Penny Boston, Director of the National Astrobiology Institute  Chryssa Kouveliotou, George Washington University</i>

**THURSDAY, NOVEMBER 3, 2016**  
**AFTERNOON SESSION CONTINUES**

3:15 pm	<i>BREAK</i>	
3:30 pm	Discussion of the topic continues Issues for Discussion: •	<i>Moderator: David Spergel</i>
4:15 pm	Summary of the Discussion	<i>David Spergel, Chair</i>
<b>OPEN SESSION : Science Talk</b>		
4:30 pm	The Science of the Ocean Worlds	<i>Kevin Hand, JPL</i>
5:30 pm	Adjourn and Members are Free for the Evening	

**FRIDAY, NOVEMBER 4, 2016**

<b>EXECUTIVE SESSION (SSB, ESSC &amp; STANDING COMMITTEE MEMBERS ONLY)</b>	
8:30 am	Board Discussions
11:45 am	Adjourn