

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

DIVISION ON ENGINEERING AND PHYSICAL SCIENCES
SPACE STUDIES BOARD

COMMITTEE ON SOLAR AND SPACE PHYSICS
October 24-25, 2017
Beckman Center, Irvine, CA
Newport Room

Tuesday October 24, 2017
Newport Room

CLOSED SESSION

8:30-9:00 AM **Closed Committee-only Discussion**

OPEN SESSION

Remote Access

WebEx: <https://nationalacademies.webex.com/nationalacademies/j.php?MTID=m4dd2133c0820070d630d24904977fd16>

Meeting Password: solarandspace

Dial In: 1-866-668-0721

Telecon Conference Code: 410 356 8429

9:05 AM	Welcome and Meeting Overview	Sarah Gibson and Maura Hagan, Co-Chairs
9:10 AM	NASA Heliophysics Update	Peg Luce and Elsayed Talaat, NASA
10:15 AM	Neural Nets, Adaptive Learning, and other Advanced Methods	Jacob Bortnik, UCLA (via WebEx)
11:00 AM	<i>Break</i>	
11:30 AM	Discussion TBD	
12:00 PM	<i>Lunch will be served in the dining hall; discussion will continue</i>	
1:00 PM	SWORM Activities Update	Steven Clarke, OSTP (via WebEx)
1:30 PM	NSF Astronomy Update	Richard Green, NSF
2:15 PM	NOAA SWPC Update	Howard Singer, NOAA
3:00 PM	<i>Break</i>	
3:30 PM	NSF Geospace Update	Mike Wiltberger, NSF
4:15 PM	Feedback and discussion about CSSP's Science Centers Report	Committee and Guests
5:00 PM	Continued planning for upcoming midterm decadal review	Committee and Guests

5:30 PM *Activities suspended to reconvene in open session for a working dinner.*

6:00 PM *Working dinner: Canaletto Ristorante, 545 Newport Center Drive, Newport Beach. If guests wish to attend the dinner, subject to available space, please RSVP in advance.*

**Wednesday October 25, 2017
Newport Room**

OPEN SESSION

Remote Access

WebEx: <https://nationalacademies.webex.com/nationalacademies/j.php?MTID=mf7af5603102dd4f0597aee3a7b975b3a>

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8:00 AM **Discussion with Thomas Zurbuchen, NASA**

Focus Session on Data

9:00 AM **When a Decade is Not Enough: Long-Term Synoptic Data Records, Their Continuity and Preservation**
Alexei Pevtsov, NSO

9:45 AM **The Past, Present, and Future of the NASA Heliophysics Data Environment (HPDE)**
Aaron Roberts, NASA GSFC
(Via WebEx)

10:30 AM *Break*

10:45 AM **Data Assimilation**
Tomoko Matsuo, Univ. of Colorado
(Via WebEx)

11:30 AM **Deep Learning: Teaming up Machines and Humans to Peek into the Black Box**
Andrés Muñoz-Jaramillo, SwRI

12:15 PM *Lunch will be served in the dining hall; discussion will continue*

1:00 PM **Discussion about data to inform SSB's Big Data Session**
Committee and Guests

2:00 PM **Habitability of Extrasolar Planets**
Rachel Osten, Space Telescope Science Institute

2:45 PM *Break*

3:00 PM **Discussion of topics for possible future CSSP reports, SSB studies, and the Spring CSSP meeting**
Committee and Guests

4:00 PM *Meeting adjourns*

WEBEX INSTRUCTIONS

To join the WebEx online meeting from your computer's browser

Click on the meeting link in the agenda above for a direct connection to the WebEx meeting and an audio connection (best quality option). You will need to enter the WebEx Meeting Password (also in the agenda above).

The WebEx service will ask you for a phone number at which to call you and connect you to the meeting's audio. You do not need to connect using the telecon number below if you use the WebEx service.

Teleconference information if not using WebEx

Call-in toll-free number: 1-866-668-0721 (within the US only)

Telecon Conference Code: 410 356 8429

There is no password for the telecon-only option

(If you require a toll free number to call in from outside the United States please contact the meeting organizer)

NOTES

Note to Observers: This meeting is being held to gather information to help the committee conduct its activities. The committee will examine the information and material obtained during open sessions in an effort to inform its work. Although opinions may be stated and lively discussion may ensue, no conclusions are being drawn at this time. Therefore, observers who draw conclusions about the committee's work based on discussions during this meeting will be doing so prematurely. Furthermore, individual committee members often engage in discussion and questioning for the specific purpose of probing an issue and sharpening an argument. The comments of any given committee member may not necessarily reflect the position he or she may actually hold on the subject under discussion, to say nothing of that person's future position as it may evolve in the course of the committee's activities.

Note to Presenters: If your presentation contains unpublished data, ITAR controlled and/or other sensitive information, please be aware that the open sessions at the meeting will be webcast and presentation materials given to the committee may be posted on a publicly accessible website. Please edit your presentations accordingly.

Working Dinner: All meeting participants can attend. The Academies will only pay for members of the committee and guest speakers. Unfortunately, the Academies cannot pay for civil servants. The cost of the dinner is \$50.00. Checks, payable to the National Academy of Sciences, are preferred.

Beckman Center: Is located on the campus of the University of California, Irvine, and is approximately 3 miles from Orange County/John Wayne Airport. See the following website for more information, including directions: <http://www7.nationalacademies.org/beckman/>.

Save the Date! Meetings in 2018: The committee will hold its next meeting on Tuesday-Thursday, March 27-29, 2018 at the National Academy of Sciences, 2101 Constitution Ave. NW, Washington, D.C. 20418. The date of the autumn meeting in 2018 is TBD.