

# SPACE SCIENCE WEEK

The National  
Academies of

SCIENCES  
ENGINEERING  
MEDICINE



## SPACE SCIENCE WEEK

### SPRING 2018 MEETING OF THE COMMITTEE ON EARTH SCIENCE AND APPLICATIONS FROM SPACE

March 27-29, 2018

NAS Building—2101 Constitution Ave NW—Washington D.C.

Updated March 22, 2018

#### Tuesday March 27, 2018

##### COMMITTEE ON EARTH SCIENCE AND APPLICATIONS FROM SPACE – Members Room

7:30 AM *Registration opens, breakfast available in the Great Hall*

##### OPEN SESSION

9:30 AM **Update on the PACE mission** Paula Bontempi, NASA HQ

10:00 **NESDIS Update** Karen St. Germain, NOAA NESDIS

10:45 *Break, food available outside meeting room*

11:00 **Discussion with Michael Freilich, NASA ESD**

12:00 PM **General Discussion; lunch available in the Great Hall**

#### PLENARY SESSION – Kavli Auditorium

##### Opening Session

1:00 PM **Welcome** Fiona Harrison, SSB Chair

1:05 PM **Quick Update on Current SSB Activities** Dick Rowberg, Interim SSB Director

#### Focus Session on NASA Science Program

1:15 PM **NASA-SMD Budget, Program, and Priorities** Thomas Zurbuchen, NASA  
*Presentation 20 mins / Q&A 25 mins*

#### Focus Session on International Collaboration – Program Briefs

2:00 PM **Short 15-minute Talks From Agency Representatives**

- **ESA Space Science** – Fabio Favata, ESA-SCI
- **ESA Human and Robotic Exploration** – David Parker, ESA-HRE
- **ESA Earth Observation Programs** - Status and Future Challenges – Maurice Borgeaud, ESA-EO
- **Chinese Academy of Sciences: Current and Future Programs** – Ji Wu, CAS National Space Science Center

- JAXA Institute of Space and Astronautical Science – Hitoshi Kuninaka, JAXA-ISAS Deputy Director General
- JAXA ISAS Research – Masaki Fujimoto, JAXA-ISAS Research

**3:30 PM** *Break, food available in the Great Hall*

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**Focus Session on International Programs – Discussion on Collaboration**

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**4:00 PM** **Personal Perspective on State of International Collaboration:** Len Fisk, President of COSPAR

**4:15 PM** **Moderated Q&A Sessions with NASA, COSPAR and International Agency Representatives** **Moderator:** Fiona Harrison, SSB Chair

**5:30 PM** **Closing Comments** **Fiona Harrison, SSB Chair**

*Public Meeting Adjourns*

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**Wednesday March 28, 2018**

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**COMMITTEE ON EARTH SCIENCE AND APPLICATIONS FROM SPACE– Members Room**

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**7:30 AM** *Registration opens, breakfast available in the Great Hall*

**OPEN SESSION**

**10:00** **Discussions with Maurice Borgeaud,** Head, ESA Earth Observation Department

**10:45** *Break, food available outside meeting room*

**11:00** **Update on USGS' Land Remote Sensing Program** Pete Doucette, USGS

**12:00 PM** **General Discussion; lunch available in the Great Hall**

**1:00** **A Briefing on the ESAS Decadal Survey** Bill Gail and Waleed Abdalati  
ESAS Decadal Survey Co-Chairs  
*Joint Session with the Committee on Solar and Space Physics*

**1:55** *Break to Closed Session*

**CLOSED SESSION**

**OPEN SESSION**

**2:45** **Discussions with representatives from NASA's Earth Science Technology Office (ESTO)**

**4:15** **Balloons, Airships, and Drones for Earth Science Research** Randy Friedl, JPL

**5:00** *CESAS Meeting Adjourns*

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**Public Lecture – Kavli Auditorium**

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**7:00** **The Gravitational Wave Astronomical Revolution**  
**Dr. David Reitze, Executive Director of the LIGO Project, CalTech**

Thursday March 29, 2018

COMMITTEE ON EARTH SCIENCE AND APPLICATIONS FROM SPACE– Members Room

The committee will be meeting in closed session.

REMOTE CONNECTION DETAILS

**Zoom Web Conference & Telecon Instructions**

Join from a computer:

1. Click on the URL (below). A popup will appear that says “Open URL:Zoom Launcher;” Click the “Open” button and let Zoom load (may take a minute).
2. Once loaded, Zoom will automatically display another pop-up for the audio connection. Please click the “call me” tab and enter the phone number you would like to be called at (i.e. home, office, mobile). Click “Call me” and follow the prompts.

Join from a mobile device:

1. Download the Zoom app from your phone’s app store (if you don’t have it installed already).
2. Click on the URL (below), or open the Zoom app and enter the Meeting ID: (below), and press join. Enter your name if requested.
3. The Zoom app will automatically display a pop-up window for the audio connection. Select the “Call my Phone” option from the menu, enter your phone number, press call, and follow any prompts.

Join by phone only:

1. Connection quality is much better via Zoom’s “Call me” feature from the webconference, so we strongly recommend that you connect this way.
2. If you are not able to do so, you can dial 1-877-853-5257 (Toll Free) and enter the Meeting ID: (below). International numbers are available at:

[https://nasem.zoom.us/zoomconference?m=dm0fun9LyXrhECcUWQt2Wwdh\\_9TUrhXG](https://nasem.zoom.us/zoomconference?m=dm0fun9LyXrhECcUWQt2Wwdh_9TUrhXG)

*NOTICE: The Zoom service allows audio and any materials exchanged or viewed during the session to be recorded and shared. Please be aware that by participating in this activity, you consent to your voice, likeness, and any materials you provide, being recorded for use and dissemination, without payment of any compensation for such use, in any language, format, or media now known or later devised, and you release the National Academies of Sciences, Engineering, and Medicine from any and all claims, liability, or damages arising from any such use. The Academies will proceed in reliance upon such consent and release. If you do not consent to the foregoing, please do not join the session.*

Topic	Time	Meeting ID	Join URL
TUESDAY, March 27			
CESAS SSW Day 1 Open	9:30 AM	604-834-274	<a href="https://nasem.zoom.us/j/604834274">https://nasem.zoom.us/j/604834274</a>
Space Science Week 2018 Plenary	1:00 PM	806-674-1884	<a href="https://nasem.zoom.us/j/8066741884">https://nasem.zoom.us/j/8066741884</a>
WENESDAY, March 28			
CESAS SSW Day 2 AM Open	10:00 AM	124-814-589	<a href="https://nasem.zoom.us/j/124814589">https://nasem.zoom.us/j/124814589</a>
CSSP SSW Day 2 Open (Joint Session)	1:00 PM	919 573 725	<a href="https://nasem.zoom.us/j/919573725">https://nasem.zoom.us/j/919573725</a>
CESAS SSW Day 2 PM Open	2:45 PM	756-157-922	<a href="https://nasem.zoom.us/j/756157922">https://nasem.zoom.us/j/756157922</a>

## GENERAL NOTES

**Pre-registration:** All participants, including committee members, invited speakers and other attendees, are strongly encouraged to preregister at <http://www.surveymonkey.com/s/4142600/07f04547401e> .

**Registration** will be located in the Great Hall during the event. Please check-in there to receive your badge.

**NAS Building:** Is located at 2101 Constitution Ave., NW, between the State Department and the Vietnam Veterans Memorial. Additional information about the NAS Building is available at <http://www.nationalacademies.org/about/contact/nax.html>.

**Wi-Fi Connection:** To connect to the Wi-Fi chose “Visitor Network” then open up a browser and click “Accept terms and conditions.” You will then be connected to the internet.

**Metro:** The closest Metro station (0.5 miles) is Foggy Bottom (Blue and Orange lines; exit and turn right, then turn left once you have passed the State Department).

**Parking:** Very limited parking is available onsite at the NAS. The 22 available parking spaces are first come first served. Other possible parking options are as follows:

- PMI (Columbia Plaza) – 2400 Virginia Avenue, NW.
- Colonial Parking – 515 20<sup>th</sup> Street, NW. Phone (202) 296-5700.
- GW Elliot School Garage is located near the Department of Interior at 1957 E Street NW.

**Space Science Week Website:** [http://sites.nationalacademies.org/SSB/SSB\\_177653](http://sites.nationalacademies.org/SSB/SSB_177653)

### The following information is provided for any members of the general public who may be in attendance:

This meeting is being held to gather information to help the committee in its charge. This committee will examine the information and material obtained during this, and other public meetings, in an effort to inform its work. Although opinions may be stated and lively discussion may ensue, no conclusions are being drawn nor will recommendations be made. Observers who draw conclusions about the committee’s work based on this meeting’s discussions 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 project. Any inference about an individual’s position are therefore also premature.

### RECORDING OF THE MEETING

This meeting will be recorded by the NRC. Please be aware that by attending the meeting, you consent to your voice being recorded for use by the NRC for the purpose of note-taking. This recording will not be publicly released, shared outside of the NRC, or used for other public purposes.

## NOTES FOR PRESENTERS

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

Mac users should assume that their presentation will be displayed via one of the NRC’s PCs. If your presentation is graphics heavy and best displayed via your own laptop, you should also bring a plain-vanilla pdf version of your presentation with you. The audience in the meeting room will see your presentation via your laptop and we will webcast the pdf file.

At some point a staff member will be asking you to sign a consent form allowing us to use your presentation, specifically to post it on our website.