NATIONAL ACADEMIES

SPACE SCIENCE WEEK

Committee on Solar and Space Physics

March 18-22, 2024 .

Hybrid Meeting

In Person at the National Academy of Sciences Building, 2101 Constitution Avenue, NW, Washington, DC Online via Zoom and Livestream

TUESDAY, MARCH 19, 2024

PLENARY SESSION Livestream Link: <u>https://vimeo.com/event/4096317</u>



Opening Session: Introductions and NASA, NSF, and NOAA Science Program Update

| 9:00 AM | Welcome | Mr. Jim Crocker SSB Vice Chair |
|----------|---|--|
| 9:00 AM | Update from the NASA Deputy Administrator (20-minute address) | Col. Pamela Melroy (USAF, ret.) NASA Deputy Administrator |
| 9:20 AM | NASA Science Mission Directorate (SMD) Overview (30-minute presentation and 30-minute discussion) | Dr. Nicola Fox Assoc. Administrator NASA-SMD |
| 10:20 AM | Break | |
| 10:40 AM | National Science Foundation (NSF) Program Update Division (20-minute presentation and 10-minute discussion) | Dr. Saul Gonzalez on Director, Mathematical and Physical Sciences (MPS) Division of Physics NSF |
| 11:10 AM | National Oceanic and Atmospheric Administration (NOAA) Program Update A (20-minute presentation and 10-minute discussion) | Dr. Steven Volz Assistant Administrator for Satellite and Information Services, NESDIS, NOAA |
| 11:40 AM | Update on the U.S. Space Council User Advisory Gr (15-minute presentation and 5-minute discussion) | roup (UAG) Dr. Lance Bush President and CEO Challenger Center |
| 12:00 PM | U.S. Department of State Update on Space Policy (20-minute presentation and 10-minute discussion) | Ms. Valda Vikmanis Keller Director, Office of Space Affairs Bureau of Oceans and International Environmental and Scientific Affairs U.S. State Department |

12:30 PM Working Lunch for Members, Speakers, and Invited Guests in the Great Hall

| International Partners Presentations | | | | | |
|--------------------------------------|---|--|--|--|--|
| 1:30 PM | European Space Agency (ESA) Program Science Highlight (25-minute presentation and 10-minute discussion) | br. Carole Mundell Director of Science, ESA | | | |
| 2:05 PM | European Space Agency (ESA) Exploration Program (25-minute presentation and 10-minute discussion) | Dr. Daniel Neuenschwander Director of Exploration, ESA | | | |
| 2:40 PM | Japanese Aerospace Exploration Agency (JAXA) Science Highlights (25-minute presentation and 10-minute discussion) | Dr. Hitoshi Kuninaka Director General, JAXA | | | |
| 3:15 PM | Break | | | | |
| 3:45 PM | Chinese National Space Science Center (NSSC) Science Highlights (25-minute presentation and 10-minute discussion) | Prof. Dong Xiaolong Deputy Director, NSSC | | | |
| 4:20 PM | Indian Space Research Organisation (ISRO) Update (25-minute presentation and 10-minute discussion) | Mr. Krunal Joshi Counsellor, Space Embassy of India | | | |
| 4:55 PM | | Prof. Frans Von der Dunk, larvey & Susan Perlman Alumni Othmer Professor of Space Law University of Nebraska-Lincoln | | | |
| 5:30 PM | Break | | | | |
| DINNER – B | BY INVITATION ONLY | | | | |

- 6:00 PM Working Dinner for Members, Speakers, and Invited Guests in the Great Hall
- 8:30 PM Plenary Session Adjourns for the Day

Space Science Week March 17-21, 2024

WEDNESDAY, MARCH 20, 2024

CLOSED SESSION 9:00 AM - 9:45 AM

| OPEN SESS | SION | |
|-------------------|---|--|
| https://vimeo.com | <u>n/event/4088825</u> | CLICK HERE TO VIEW |
| 10:00 AM | NASA's Sounding Rocket Program | Catherine Hesh Sounding Rockets Programs Office Robert Pfaff, GSFC |
| 11:00 AM | ELFIN CubeSat: How did you make it happen? Science and lessons learned | Vassilis Angelopoulos University of California, Los Angeles |
| 11:30 AM | LLITED CubeSat: How did you make it happen? Science and lessons learned | Rebecca Bishop Aerospace Corporation |
| 12:00 PM | CubeSat Discussion | |
| 12:30 PM | Working Lunch for Members, Speakers, Registered Guests, and Staff (60 minutes) Great Hall | |
| 1:30 PM | Update from NOAA Space Weather Prediction Center Bill Murta NOAA SW | |
| 1:50 PM | Update from NOAA National Environmental Satellite, Data, and Elsayed Ta Information Service NOAA NES | |
| 2:10 PM | Discussion with NOAA | |
| 2:30 PM | Break (30 minutes) | |
| 3:00 PM | Update from NASA Heliophysics Division | Joseph Westlake NASA Heliophysics Division |
| 3:45 PM | Discussion with NASA Heliophysics Division | |
| 4:15 PM | General Discussion of Open Topics C | ommittee, Speakers, and Invited Guests |
| 5:00 PM | Meeting Adjourns for the Day | |

Keynote Space Science Week Public Lecture

PUBLIC LECTURE SESSION

Livestream Link: <u>https://vimeo.com/event/4096320</u>

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7:00 PM **Growing Insight into Space** Plants are Enablers of Extraterrestrial Exploration

Dr. Anna-Lisa Paul

Director, Interdisciplinary Center for Biotechnology Research (ICBR) University of Florida

Speaker Biography

Dr. Anna-Lisa Paul is a plant molecular biologist; she is a Professor at the University of Florida and the Director of UF's Interdisciplinary Center for Biotechnology Research (ICBR). She has been active in the spaceflight research community for over 25 years and has served that community as the President of the American Society for Gravitational and Space Research, as a member of the ISS Standing Review Board, on NASA's GeneLab Science Council, and on the Suborbital Applications Research Group (SARG) advisory board for the Commercial Spaceflight Federation. She serves on the National Academies Committee on Biological and Physical Sciences in Space (CBPSS). Paul has launched 12 orbital experiments to study how plants respond to the spaceflight environment, taken her science to extreme terrestrial environments (the Arctic and Antarctica) as planetary analogs, and worked with true lunar regolith from the Apollo era to evaluate plant molecular responses to that novel environment. She also uses suborbital launch vehicles to explore the effect of the transition to space on the molecular processes of plants. Paul is a recipient of the NASA Medal of Honor for Exceptional Scientific Achievement. She is a Fellow of the American Association for the Advancement of Science (AAAS) and a Fellow of the American Society for Gravitational and Space Research (ASGSR). Paul's fundamental belief is that humans are explorers, and when we leave Earth's orbit, plants will help us make the journey



THURSDAY, MARCH 21, 2024

OPEN SESSION

https://vimeo.com/event/4088830

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| 8:30 AM | Committee Room Opens for Members; Breakfast Served in the Great Hall | | |
|----------|--|---|--|
| 9:00 AM | Update from NSF Geospace Section | Mangala Sharma NSF Geospace Section | |
| 9:30 AM | Update from NSF Division of Astronomical Sciences | Carrie Black NSF Astronomical Sciences | |
| 9:50 AM | Discussion with NSF | NSF Astronomical Sciences | |
| 10:00 AM | Break (15 minutes) | | |
| 10:15 AM | Communication strategy for decadal survey and for changes in Joseph Westlake Jared Leisne NASA policies NASA Heliophysics Division | | |
| 11:00 AM | Learning how the solar corona works by creating and studyin analogous magnetohydrodynamic phenomena in the lab | g Paul Bellan Caltech | |
| 12:00 PM | Working Lunch for Members, Speakers, Registered Guests, a Great Hall | nd Staff | |
| 1:00 PM | How do agencies use Academies report recommendations? Discussion of decadal midterm responses as examples Progress Toward Implementation of the 2013 Decadal Survey for Solar and NASA response to Progress Toward Implementation recommendations | | |
| 2:00 PM | Break (30 minutes) to go to closed session | | |

CLOSED SESSION

3:45 PM MEETING ADJOURNS

IMPORTANT NOTES

Presenters:

- Please do not include unpublished data, ITAR-controlled or sensitive information in your presentation.
- A National Academies Board staff member will ask you to sign a form before the meeting allowing us
 permission to use your likeness and presentation for our livestream video, which will be posted on our
 Board website after the meeting. Please get in touch with us before the meeting if you have any concerns
 about this usage.

Members and Presenters:

- Remote access will be provided through Zoom. This will allow you to participate in the meeting even if you can't be physically present.
- Please note that Zoom allows audio and any materials exchanged or viewed during the session to be recorded and shared.
- By participating in this activity, you agree to let your voice, likeness, and any materials you provide be recorded for use and dissemination. This includes any language, format, or media now known or later devised.
- You release the National Academies of Sciences, Engineering, and Medicine from any and all claims, liability, or damages arising from any such use. If you disagree, please do not join the session.

Members of the General Public:

- Remote access will be provided through a live stream on Vimeo. This will also be publicly available and posted on the Board website. You do not need to register.

Thank you all for your cooperation, and we look forward to a successful meeting.