

Space Studies Board

Committee on Planetary Protection Fall Meeting

December 9-10, 2025
Hybrid Meeting
National Academies, Washington, DC
ALL TIMES IN US EASTERN STANDARD TIME

TUESDAY, DECEMBER 9, 2025

OPEN SESSIC Livestream Li	oN nk: https://vimeo.com/event/5542617 CLICK HERE TO JOIN
9:30 AM	NASA Office of Planetary Protection Update: Planetary Protection and the Moon-to-Mars Strategy (30-minute presentations & 30-minute discussion period) Dr. Nick Benardini Dr. Nick Benardini Planetary Protection Office NASA
10:30 AM	Break (15 minutes)
10:45 AM	Moon-to-Mars: Managing Knowledge Gaps and Enabling Missions (45-minute presentation and 30-minute discussion) Dr. Andy Spry Senior Scientist Banner Quality Management Inc.
12:00 PM	Working Lunch for Members, Speakers, and Invited Guests
1:00 PM	Analytical Chemistry, Biotechnology, Contamination Control, Planetary Protection (ABCP) Group: Overview and Future Work (25-minute presentation and 25-minute discussion) Jet Propulsion Laboratory California Institute of Technology
1:50 PM	Break (15 minutes)
2:05 PM	Moon-to-Mars: Risk Assessment Challenges (45-minute presentation and 30-minute discussion)
3:20 PM	Break (15 minutes)
3:35 PM	A Case-Based Approach to Backward Planetary Protection Compliance: From Containment to Earth Return (25-minute presentation and 25-minute discussion) Beginnering and Formulation Jet Propulsion Laboratory California Institute of Technology
4:25 PM	Break into Closed Session (15 minutes)

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WEDNESDAY, DECEMBER 10, 2025

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Livestream Link: https://vimeo.com/event/5542620

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10:30 AM	COSPAR Panel on Planetary Protection Update (35-minute presentation and 25-minute discussion)	Dr. Athena Coustenis COSPAR PPP
11:30 AM	Break (15 minutes)	
11:45 AM	Planetary Protection Policy: Lessons from Improving Multiag Coordination of Launch Approval for Nuclear Material (30-minute presentation & 15-minute discussion period)	gency Mr. Don Helton Nuclear Flight Safety Officer NASA
12:30 PM	Working Lunch for Members, Speakers, and Invited Guests	
1:30 PM	A Science Strategy for the Human Exploration of Mars (30-minute presentation and 30-minute discussion)	Dr. Lindy Elkins-Tanton Dr. Dava Newman Study Co-Chairs
2:30 PM	Break (15 minutes)	
2:45 PM	Summary Comments by the Committee and Open Dialogue (60-minute discussion)	Dr. Lisa Pratt Mr. David Fidler CoPP Co-Chairs
3:45 PM	Adjourn to Closed Session; Break (15 minutes)	

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.

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.

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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

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.

Statement of Task

The National Academies of Sciences, Engineering, and Medicine (NASEM) will appoint the Committee on Planetary Protection (CoPP) to operate as a long-term ad hoc committee. The disciplinary scope of CoPP includes the study of those aspects of planetary environments, the life sciences, spacecraft engineering and technology, and science policy relevant to the control of biological cross-contamination arising from the robotic spacecraft missions and the human exploration and utilization of solar system bodies.

CoPP will have two primary tasks:

- 1. To monitor progress in implementing the planetary protection guidelines associated with priority missions and programs identified in the most recent planetary science decadal survey, and other relevant reports issued by NASEM; and
- 2. To serve as a source of information and advice on those measures undertaken by robotic spacecraft and human exploration missions to protect the biological and environmental integrity of extraterrestrial bodies for future scientific studies and the means to preserve the integrity of Earth's biosphere when spacecraft return potentially hazardous extraterrestrial materials to Earth.

When requested by NASA and as approved by NASEM in accordance with its procedures the committee may write reports detailing progress in areas relating to NASA's planetary protection guidelines or new scientific and technical developments. The reports will be based on evidence gathered by the committee. The reports may address key activities undertaken by NASA as well as the status of its actions that relate to the state of implementation of priority missions and programs.

Through its regular meetings, the CoPP will also serve the secondary functions of:

- 1. Providing an independent, authoritative forum for the scientific community, the federal government, international space agencies, relevant private-sector entities and organizations, and the interested public to identify and discuss emerging issues in the scientific, technical, and engineering aspects of planetary protection policies and guidelines;
- 2. Identifying and prioritizing necessary research and development activities required to advance the development of planetary protection guidelines designed to ensure that the exploration and utilization of extraterrestrial environments is conducted responsibly; and,
- 3. Providing a forum for interactions with the International Science Council's Committee on Space Research and other national and international organizations through the addition of international participants when appropriate and in coordination with the SSB.