

Key Non-Polar Destinations Across the Moon to Address Decadal-level Science Objectives with Human Explorers: Panel on Heliophysics, Physics, and Physical Science Meeting No. 1

June 10-12, 2025

Hybrid Meeting

Keck Center, 500 5th Street, NW, Washington, DC

ALL TIMES IN US EASTERN DAYLIGHT TIME (UTC-4:00)

TUESDAY, JUNE 10, 2025

OPEN SESSION

Livestream: <https://vimeo.com/event/5160379>

12:30 PM *Working Lunch for Members, Speakers, and Invited Guests*

**1:30 PM Solar Energetic Particles and Space Weather
at the Lunar Surface**
(25-minute presentation and 20-minute discussion)

Dr. George Ho
Senior Program Manager,
Southwest Research Institute

2:15 PM Low Frequency Radio Telescopes on the Moon
(25-minute presentation and 20-minute discussion)

Dr. Jack Burns*
Prof., University of Colorado Boulder

3:00 PM Geospace Imaging from the Lunar Surface
(25-minute presentation and 20-minute discussion)

Dr. Larry Paxton*
Chief Scientist for Geospace,
Johns Hopkins U., Applied Physics Lab.

3:45 PM *Break into Closed Session*

WEDNESDAY, JUNE 11, 2025

OPEN SESSION

Livestream: <https://vimeo.com/event/5160388>

**10:00 AM Quantum Technologies in Space
for New Physics Discoveries**
(25-minute presentation and 20-minute discussion)

Dr. Marianna Safronova
Professor, University of Delaware

10:45 AM Gravitational Wave Detectors on the Moon
(25-minute presentation and 20-minute discussion)

Dr. Volker Quetschke
Professor, University of Texas
Rio Grande Valley

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11:30 AM *Working Lunch for Members, Speakers, and Invited Guests*

12:30 PM Optical Interferometry on the Moon
(25-minute presentation and 20-minute discussion)

Dr. Gioia Rau
Program Director, NSF-AST

1:15 PM The Dust and Plasma Environment of the Moon
(25-minute presentation and 20-minute discussion)

Dr. Jasper Halekas
Professor, University of Iowa

2:00 PM *Adjourn to Closed Session*

THURSDAY, JUNE 12, 2025

The panel meets entirely in closed session.

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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- Please do not include unpublished data, ITAR-controlled or sensitive information in your presentation.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.