

The National Academies of
SCIENCES • ENGINEERING • MEDICINE
DIVISION ON ENGINEERING AND PHYSICAL SCIENCES
SPACE STUDIES BOARD

Committee on Astrobiology and Planetary Sciences

Fall Meeting: September 16-17, 2020

Teleconference Meeting

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

This agenda is a draft, subject to change, and was last updated on 8/19/2020 10:56 AM

AGENDA

WEDNESDAY, SEPTEMBER 16, 2020

OPEN SESSION

Zoom Remote Access Information – Day 1 Open Session

Link: <https://nasem.zoom.us/j/92018213171?pwd=SlZwOGJaVGZCUDh3Vm5rdStCay9Ydz09>

Password: 941743

Phone: +1-646-828-7666

Meeting ID: 920-1821-3171

Updates from NASA HQ and Planetary Science Division Missions

10:00 AM	Welcome and Discussion of Today's Agenda	<i>Dr. Christopher House, CAPS Co-Chair / Dr. Bill McKinnon, CAPS Co-Chair</i>
10:15 AM	Update from NASA Planetary Science Division (40 minute presentation & 20 minute discussion period)	<i>Dr. Lori Glaze, Director, Planetary Science Division, NASA-HQ</i>
11:15 AM	Status Update on <i>Psyche</i> Mission (45 minute presentation & 15 minute discussion period)	<i>Dr. Lindy Elkins-Tanton, Principle Investigator, Psyche Mission, Arizona State U.</i>
12:15 PM	Break (60 minute break period)	
1:15 PM	Status Update on <i>VIPER</i> Mission (45 minute presentation & 15 minute discussion period)	<i>Dr. Anthony Colaprete, Project Scientist, VIPER Mission, NASA-Ames</i>
2:15 PM	Break (60 minute break period)	

Discussion on Life Detection Instrumentation

3:15 PM	NASA Ames Developments of Life Detection Instruments (30 minute presentation)	<i>Dr. Antonio Ricco, Chief Technologist – Small Payloads, NASA-Ames</i>
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3:45 PM **NASA GSFC Developments of Life Detection Instruments**
(30 minute presentation)

*Dr. William Brinckerhoff, Senior Scientist,
Solar System Exploration Division, NASA-GSFC*

4:15 PM **Roundtable Discussion with Committee Members**
(30 minute discussion)

*Led by Dr. Christopher House, CAPS Co-Chair /
Dr. Bill McKinnon, CAPS Co-Chair*

4:45 PM Committee Adjourns to Closed Session

CLOSED SESSION

5:30 PM Committee Adjourns for the Day

THURSDAY, SEPTEMBER 17, 2020

OPEN SESSION

Zoom Remote Access Information – Day 2 Open Session

Link: <https://nasem.zoom.us/j/92018213171?pwd=SlZwOGJaVGZCUDh3Vm5rdStCay9Ydz09>

Password: 941743

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Science Discussions on Early Earth Environment

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|-----------------|--|---|
| 12:00 PM | Reconvening Remarks | <i>Dr. Christopher House, CAPS Co-Chair /
Dr. Bill McKinnon, CAPS Co-Chair</i> |
| 12:05 PM | H₂ Production in Precambrian Serpentinizing Systems
(20 minute presentation & 10 minute discussion period) | <i>Dr. Benjamin Tutulo Professor, Dept. of
Geosciences, U. of Calgary</i> |
| 12:35 PM | Modeling Earth's Early Atmosphere
(20 minute presentation & 10 minute discussion period) | <i>Dr. Kevin Zahnle, Scientist, NASA-Ames</i> |
| 1:05 PM | Presentation by the PCE₃ Research Coordination Network
(30 minute presentation & 30 minute discussion period) | <i>Dr. Ramanarayanan Krishnamurthy, Professor,
Chemistry, Scripps Research Institute
Dr. Timothy Lyons, Professor, Biogeochemistry,
U. of California – Riverside
Dr. Karyn Rogers, Professor, Earth and Environmental
Sciences, Rensselaer Polytechnic
Dr. Loren Williams, Professor, Institute for Bioengineering
and Physical Sciences, Georgia Tech</i> |
| 2:05 PM | Committee Adjourns to Closed Session | |

CLOSED SESSION

- 5:00 PM** **Committee Adjourns Meeting**

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.

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 NASEM'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.

REMOTE CONNECTION DETAILS

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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.

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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/j/92018213171>

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Date	Start Time	Type	Meeting ID	Join Link
September 16, 2020	10:00am EDT	Open Session	920-1821-3171	https://nasem.zoom.us/j/92018213171 Password: 941743
September 17, 2020	12:00pm EDT	Open Session	920-1821-3171	https://nasem.zoom.us/j/92018213171 Password: 941743