Astro 2020
Decadal Survey on Astronomy and Astrophysics

The National Academies of SCIENCES ENGINEERING MEDICINE

DIVISION ON ENGINEERING AND PHYSICAL SCIENCES
BOARD ON PHYSICS AND ASTRONOMY
SPACE STUDIES BOARD

Panel on Electromagnetic Observations in Space-1
(to be renamed: Panel on Optical, Ultra-Violet, and InfraRed Observations in Space)
Draft Agenda (subject to change)
Meeting #2: January 27-29, 2020

Monday, January 27, 2019
Keck 201

500 Fifth St., NW Washington, DC 20001

OPEN SESSION

10:45 a.m.	Transient Astrophysics Probe	Jordan B. Camp, NASA Goddard Brad Cenko, NASA Goddard Scott Barthelmy, NASA Goddard
11:45 a.m.	*Working Lunch Available in the Meeting Room*	
12:45 p.m.	CETUS Probe	William C. Danchi, NASA Goddard
1:45 p.m.	Cosmic Evolution Through UV Surveys (CETUS)	Sally Heap, U. Maryland
2:45 p.m.	*Break*	
3:00 p.m.	ANUBIS	Paul A. Scowen; Arizona State University
4:00 p.m.	EarthFinder	Peter Plavchan; George Mason University
5:00 p.m.	The status of eta_Earth (via zoom)	Jessie Christiansen, Caltech
5:30 p.m.	*Meeting Adjourns to an Alternate Location*	

Statement of Task:

The Panel on Electromagnetic Observations from Space 1 (EOS1) will identify and suggest to the decadal survey committee a prioritized program of federal investment in research activities that involve observations of astrophysical phenomena primarily by means of optical and near-infrared electromagnetic measurements from space. The EOS1 panel will also consider technology development needs to support the prioritized program. In formulating its conclusions, the EOS1 panel will draw on several sources of information: (1) the science forefronts identified by the Astro2020 science panels, (2) input from the proponents of research activities, and (3) independent cost, risk, and technical readiness evaluations. The EOS1 panel's suggestions will be integrated into a program for all of astronomy and astrophysics by the Astro2020 Committee.

Overall Project Statement of Task

The National Academies of Sciences, Engineering, and Medicine shall convene an ad hoc survey committee and supporting study panels to carry out a decadal survey in astronomy and astrophysics. The study will generate consensus recommendations to implement a comprehensive strategy and vision for a decade of transformative science at the frontiers of astronomy and astrophysics. The committee, with inputs from study panels covering the breadth of astronomy and astrophysics, will carry out the following tasks:

1. Provide an overview of the current state of astronomy and astrophysics science, and technology research in support of that science, with connections to other scientific areas where appropriate;
2. Identify the most compelling science challenges and frontiers in astronomy and astrophysics, which shall motivate the committee's strategy for the future;
3. Develop a comprehensive research strategy to advance the frontiers of astronomy and astrophysics for the period 2022-2032 that will include identifying, recommending, and ranking the highest priority research activities — taking into account for each activity the scientific case, international and private landscape, timing, cost category and cost risk, as well as technical readiness, technical risk, and opportunities for partnerships. The strategy should be balanced, by considering large, medium, and small activities for both ground and space. (Activities include any project, telescope, facility, experiment, mission, or research program of sufficient scope to be identified separately in the final report.) For each recommended activity the committee will lay out the principal science objectives and activity capabilities, including assumed or recommended activity lifetime, where possible;
4. Utilize and recommend decision rules, where appropriate, for the comprehensive research strategy that can accommodate significant but reasonable deviations in the projected budget or changes in urgency precipitated by new discoveries or unanticipated competitive activities;
5. Assess the state of the profession, using information available externally and, if necessary, data gathered by the study itself, including workforce and demographic issues in the field. Identify areas of concern and importance to the community raised by this assessment in service of the future vitality and capability of the astronomy and astrophysics work force. Where possible, provide specific, actionable and practical recommendations to the agencies and community to address these areas. This report shall be made available following the completion of the study.

NOTES

Keck Center:

Parking: Parking is free and space is usually plentiful. Participants are requested to park in the designated areas only.

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

Meals: Lunch and breakfast will be available at the meeting. In order to remain in compliance with government guidelines that preclude civil servants from accepting meals, we have provided a break-down for civil servants needing to reimburse those costs. The reimbursement cost of breakfast is $15 and is $16 for lunch. Checks, payable to the National Academy of Sciences, are preferred.

Astro2020 Project Website: www.nas.edu/astro2020

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 on Zoom by the National Academies of Sciences, Engineering, and Medicine ("The Academies"). Please be aware that by attending the meeting, you consent to your voice and likeness being for use on the Committee's website and in any media now known or hereafter devised in perpetuity, and you release The Academies from any liability due to such usage.

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

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 web-conference, so we strongly recommend that you connect this way.
2. If you are not able to do so, you can dial 1-XXX-XXX-XXXX (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.

Topic	Time (EDT)	Meeting ID	Join URL
Monday, January 27, 2020			
Astro2020 Panel on Electromagnetic Observations in Space 1 (OPEN)	10:45 AM	890-551-165	https://nasem.zoom.us/j/890551165