

Fall Meeting of the BOARD ON PHYSICS

October 21-22, 2026

Irvine, California: Arnold and Mabel Beckman Center, Board Room and Huntington

Online via Zoom: Connection info to be added

WEDNESDAY, OCTOBER 21, 2026 (All Times Pacific)

OPEN SESSION

9:45 AM	Public Welcome	
9:50 AM	Succeeding the BPA: 40 Years of Service and the New Board	<u>Dr. Christopher Jones</u> , NASEM Physics Staff Lead
10:15 AM	Overview of DOE and NSF Physics-related Activities, Priorities, & Emerging Issues	<u>Dr. Michael J. Cavagnero</u> *# Physics Section Head, Mathematical and Physical Sciences National Science Foundation <u>Dr. Regina Rameika</u> * Associate Director, Office of High Energy and Nuclear Physics Office of Science Department of Energy
12:30 PM	Lunch Break	

COMMUNITY LIGHTNING SESSION: Magnetism Panel

1:30 PM	<i>Prompt: What are the most exciting and frontier research directions in the field?</i>	<u>Dr. Barry Zink</u> *, Professor of Physics and Astronomy, University of Denver <u>Dr. Kathleen Amm</u> *#, Director, National High Magnetic Field Laboratory <u>Dr. Yuri Suzuki</u> *, Professor of Applied Physics, Stanford University <u>Dr. Nai-Chang Yeh</u> *, Thomas W. Hogan Professor of Physics, Caltech
2:30 PM	Overview for New National Academies Study: <i>Milestone-Based Fusion Development (MBFD) Program Assessment</i>	<u>Dr. Kasia Kornecki</u> , NASEM Study Director
2:45	Break	

QUANTUM SCIENCE SESSION

3:00 PM	Report Release: <i>"21st Century Tools at the Interface of Atomic, Molecular, and Optical (AMO) Science and Quantum Information Science (QIS)"</i>	<u>Dr. Mette Gaarde</u> * Boyd Professor and Les and Dot Broussard Alumni Professor of Physics Louisiana State University <u>Dr. Prem Kumar</u> * Chair and John A. Dever Professor of Electrical and Computer Engineering Northwestern University Co-Chairs, NASEM Committee on Atomic, Molecular, and Optical Sciences
3:40 PM	DOE Quantum Technology Outposts in Fundamental Physics	<u>Dr. Zack Goff-Eldredge</u> *# Program Manager, Quantum Information Science, Office of High Energy Physics U.S. Department of Energy Office of Science
4:10 PM	Upcoming National Academies Quantum Materials Committee Update	<u>Dr. Christopher Jones</u> , Staff Lead
4:20 PM	NSF X-Labs and Project Triad Quantum Initiative	[TBD NSF representative]
4:50 PM	Break for Light Reception	

Agenda information continues on page two

#: virtual *: confirmed

ALL TIMES PDT

DRAFT

OPEN SESSION

9:00 AM Reconvene and Plan for the Day

Peer Review at an Inflection Point: What Should AI Change—and What Must We Preserve

9:05 AM Dr. Tim Vines*, *Plenary*, Founder and CEO, DataSeer
Dr. Sacha Vignieri*, *Plenary*, Deputy Editor, Research, Science, AAAS

Dr. Kiri Wagstaff*, *Panelist*, Special Advisor on Artificial Intelligence, Oregon State University
Mr. Alex Glynn*, *Panelist*, Assistant Professor, Kornhauser Health Sciences Library, University of Louisville
Mr. Michael Clarke*, *Panelist*, Managing Partner, Clarke & Esposito
Dr. Paul Ginsparg*, *Panelist*, Professor of Information Science and Physics, Cornell University
Prof. Tom Stafford (tentative)*, *Panelist*, Senior Research Fellow, Research on Research Institute (RoRI); Professor of Cognitive Science, University of Sheffield
Dr. Jeff Lewandowski (pending), *Panelist*, APS Publishing Director
[TBD additional panelists]

11:00 AM [TBD OSTP representative]

11:40 AM Lunch Break

12:40 PM AI and Ways to Overcome Hallucinations Dr. Moriba Jah*
Professor, Department of Aerospace Engineering and Engineering Mechanics, The University of Texas at Austin

COMMUNITY LIGHTNING SESSION: Biological Physics Panel

1:20 PM *Prompt: What are the most exciting and frontier research directions in the field?* Dr. William Bialek*, Professor of Physics and Biophysics, Princeton University
Dr. Vernita Gordon*, Professor of Physics, The University of Texas at Austin
Dr. Karen Fleming*, Professor of Biophysics, Johns Hopkins University
[TBD additional panelists]

2:20 PM Break

2:40 PM Update on the NSF-DOE Vera C. Rubin Observatory Dr. Bob Blum*
Director of Operations, Vera C. Rubin Observatory

3:20 PM New NSF OPAL Short-Pulse Laser Facility Dr. Vyacheslav (Slava) Lukin*
Program Director for Plasma Physics, NSF Division of Physics

4:00 PM Break, Adjourn Open Session; Transition to Executive Session; Break (15 minutes)

IMPORTANT NOTES

Presenters:

- Please do not include 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 may be posted on the Board website after the meeting. Please contact us before the meeting with any concerns about this usage.

Committee & Board Members and Presenters:

- Remote access will be provided through Zoom for those not attending in person.
- Please note that Zoom and Team allow audio and materials exchanged or viewed during the session to be recorded and shared.
- By participating, you agree to let your voice, likeness, and any materials you provide be recorded for use and dissemination in any format or media.
- You release the National Academies of Sciences, Engineering, and Medicine from claims, liability, or damages arising from such use. If you disagree, please do not join the session.

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