

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

DIVISION ON ENGINEERING AND PHYSICAL SCIENCES
BOARD OF PHYSICS AND ASTRONOMY

Committee on Elementary Particle Physics – Progress and Promise

Meeting No. 13

October 26, 2023

Virtual Meeting

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

This agenda is a draft, subject to change, and was last updated on 10/25/2023 6:09 PM

AGENDA

THURSDAY, OCTOBER 26, 2023

OPEN SESSION

Livestream Link: <https://vimeo.com/event/3823366>

- 10:00 AM** **Welcoming Remarks** *Dr. Maria Spiropulu, Co-Chair /
Dr. Michael Turner, Co-Chair*
- 10:05 AM** **Panel Discussion on Theory**
(45 min moderated discussion, 35 min Q&A, & 10 min closing remarks)
Moderator: *Dr. Nima Arkani-Hamed, EPP Member*
Panelists: *Dr. Keith Dienes, Program Director, Elementary Particle Physics – Theory, National Science
Foundation*
*Dr. Greg Gabadadze, Senior Vice President, Mathematical and Physical Sciences Division,
Simons Foundation*
*Dr. William Kilgore, Program Manager for Theoretical Physics, Office of High Energy Physics,
Department of Energy*
Dr. Eric Laenen, Professor, Institute of Physics, University of Amsterdam
- 11:35 AM** *Committee Adjourns to Closed Session*

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

Your presentation may not include unpublished data, ITAR controlled and/or other sensitive information.

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.

STATEMENT OF TASK

Task Initiated on 25 August 2021

The National Academies of Sciences, Engineering, and Medicine will convene an ad hoc committee to:

- Identify the fundamental questions in particle physics that could motivate research in the next decade and beyond, irrespective of the tools and techniques to address them.
- Distinguish which of these questions could be addressed with available experimental and theoretical tools in the coming decade and which could require new techniques or approaches.
- Suggest technical research areas that could provide particle physics with new tools needed to enable new techniques and approaches.
- Suggest different ways of thinking and alternative approaches from other areas of science that could be incorporated into and benefit the overall particle physics enterprise.