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. 6
### April 3-4, 2023

**NAS Building, Room 125, 2101 Constitution Ave. NW, Washington, D.C.**
**ALL TIMES IN US EASTERN DAYLIGHT TIME (UTC-4:00)**

This agenda is a draft, subject to change, and was last updated on 4/2/2023 12:15 PM

## AGENDA

## MONDAY, APRIL 3, 2023

**OPEN SESSION**

*Livestream Link: https://vimeo.com/event/3223892*

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| **10:00 AM** | **Committee Progress and Future Plans** | ***Dr. Maria Spiropulu, Co-Chair / Dr. Michael Turner, Co-Chair*** |
| **10:15 AM** | **Maximizing EPP-2024 Impact for US Science**<br>(Remarks and Committee discussion period) | ***Dr. Harriet Kung, Principal Deputy Director, Office of Science, DOE / Dr. Sean Jones, Asst. Director, MPS, NSF*** |
| **11:15 PM** | **Rare Processes and Precision Measurements**<br>(60 minute presentation & 30 minute discussion period) | ***Dr. Marina Artuso, Professor, Physics, Syracuse U. / Dr. Nima Arkani-Hamed, EPP Member / Dr. David E. Kaplan, Professor, Physics, Johns Hopkins U. (TBC)/ Dr. Giorgio Gratta, Professor, Physics, Stanford U.*** |
| *12:45 PM* | *Break for Lunch* | |
| **2:00 PM** | **Panel on International Collaborations**<br>(45 min moderated discussion, 35 min Q&A, & 10 min closing remarks)<br>***Moderator:*** ***Dr. Marcela Carena, EPP Member***<br>***Panelists:*** ***Dr. Eliezer Rabinovici, President, CERN***<br>***Dr. Regina Rameika, Assoc. Director, Office of High Energy Physics, DOE***<br>***Mr. Cole Donovan, Staff Director, National Science, Technology and Security Roundtable, National Academies*** | |

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| **3:30 PM** | **Neutrino Physics Beyond Dune and T2K *** (30 minute presentation & 30 minute discussion period) | ***Dr. Andre de Gouvea, Professor, Physics, Northwestern U.*** |
| **4:30 PM** | **Day 1 Closing Comments** | ***Dr. Maria Spiropulu, Co-Chair / Dr. Michael Turner, Co-Chair*** |
| *4:35 PM* | *Meeting Adjourns to Closed Session (or at a time at the discretion of the Co-Chairs)* | |

## TUESDAY, APRIL 4, 2023

*Committee Meets in 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.

## 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