# **HFCC Strategy Meeting Objectives**

Srini Rajagopalan & Tor Raubenheimer

**BNL & SLAC** 

Nov. 8, 2024

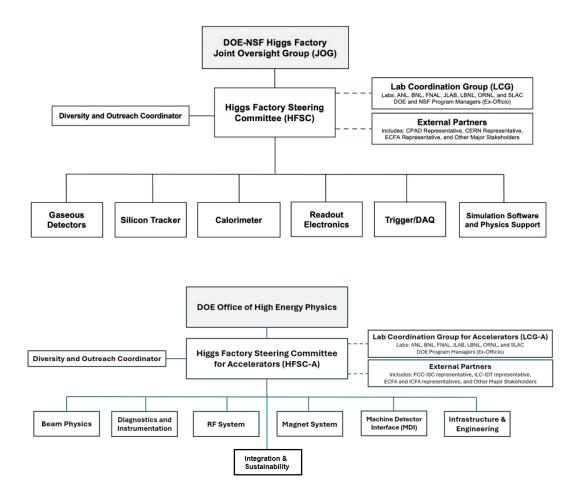




# **U.S. Higgs Factory Consortium Committee**



Created by DOE and NSF to provide strategic direction and leadership for the U.S. community to engage, shape, and thereby advance the development of the PED and Accelerator program for a potential future Higgs factory; and to ensure cooperation with our partners in the international program.



HFCC Strategy Meeting, Nov. 8, 2024

# **U.S. Higgs Factory Consortium Committee**



### HFCC should coordinate efforts in the following areas:

- Physics and technical feasibility studies, including any associated design and R&D efforts, to advance detector concepts and accelerator designs for a future e+/e- Higgs factory;
- Prioritization and stewardship of the national R&D efforts;
- Development of the pre-project R&D scope that will be required initiate a project;
- Conceptualization of the software and computing for the experiments and accelerator;
- Develop various funding models that will be required to support the R&D efforts
- Ensure collaborations by the U.S. with our partners are cost-effectively carried out to advance the future Higgs factory initiatives.

# **European Strategy for Particle Physics (ESPP)**



3rd ESPP formed last summer.

A main goal for the ESPP is to develop a visionary and concrete plan that greatly advances knowledge in fundamental physics through the realization of the next flagship collider at CERN, and to prioritize alternative options to be pursued if the preferred plan turns out not to be feasible or competitive

The ESPP is gathering input this spring leading to an open meeting at the beginning of summer

# Two main objectives for this meeting



1. Start discussions across the HFCC

2. Plan what we want submit from the HFCC

# Agenda



### <u>Friday</u>

8:40-9:10	European Strategy Process
9:10-9:40	Physics at an e+e- collider
9:40-10:00	Physics at an h-h collider
10:00-10:40	Integrated FCC program
10:40 Break	
11:00-11:30	High-field magnets & FCC-hh scenarios
11:30-12:00	Consideration for a Linear Collider option
12:00-12:30	Discussion
12:30 Lunch	
1:30-2:15	Potential U.S. scope in a future collider program (Accelerator)
2:15-3:00	Potential U.S. scope in a future collider program (Experiment)
3:30-5:30	Round Table Discussion
6:30 Dinner	

#### **SATURDAY**

8:30-10:30	Summary of ideas from Friday
10:30-12:30	Technical discussion on near term needs, preparing for the SLAC workshop, and the ESPP input
12:30 Adjourn	

### **Next Steps**



### After this meeting there will be:

A discussion at HEPAP, December 5-6, 2024

### Further discussion with the HFCC planned:

- At SLAC (PED), December 18-19, 2024
- At FNAL (Acc), January 15-16, 2025

Another joint session in late February/early March prior to submission of our input to ESG.