

# Program Committee Meeting

May 4, 2022

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PC Co-chairperson

# Program status

- The morning part of the agenda is being planned by the Frontier conveners.
  - Considerable attention has been paid to the many proposed cross-frontier meetings, which require a lot of rooms and raise the cost of the meeting
    - That is now under control
  - The cross-frontier meetings will take place in the time allotted to morning sessions
  - If the coffee breaks have to be at the same time, they should appear on the schedule
    - The time for them has to come out of the time scheduled for the parallel meetings

# Purpose of the afternoon plenaries

- To present the most important ideas and considerations that go into the formation of our **shared** scientific vision so everyone can understand, question, and hopefully eventually support it.
  - **The frontiers were asked to propose topics that they particularly wanted to communicate to the whole community**
  - Similarly, DPF had a collection of topics that they wanted addressed
    - Some were presentations by various groups international or national or topical groups
    - Others were massively cross-cutting issues such as DEI, career issues for young scientists, sustainability, broader impacts, opportunities by young scientists to speak and present their issues.
  - Snowmass is a well-publicized event. The press will be present. We want to also project a good image.
    - We are already getting inquiries
    - We have yet to consider how to present ourselves to the public and press
- At the Program Committee meeting on April 20 , the All-Conveners meeting on April 22, and the April 25 Advisory Committee meeting, we began to bring the plenary program into some balance with the available time. I hope we are there.

Name Box	B	C	D	E	F	G	H	I	J	K	L	
	Sunday, July 17	Monday, July 18	Tuesday, July 19	Wednesday, July 20	Thursday, July 21	Friday, July 22	Saturday, July 23	Sunday, July 24	Monday, July 25	Tuesday, July 26	Wednesday, July 27	
07:30 - 08:00 AM	Registration	Parallel									Summary Plenary	Closeout Plenary
08:00 - 08:30 AM												
08:30 - 09:00 AM												
09:00 - 09:30 AM	Introductory Plenary	Parallel									Summary Plenary	Closeout Plenary
09:30 - 10:00 AM												
10:00 - 10:30 AM												
10:30 - 11:00 AM	Lunch	Lunch, Poster & Exhibit									Lunch	Lunch
11:00 - 11:30 AM												
11:30 - 12:00 PM												
12:00 - 12:30 PM	Lunch	Lunch, Poster & Exhibit									Lunch	Lunch
12:30 - 01:00 PM												
01:00 - 01:30 PM												
01:30 - 02:00 PM	Introductory Plenary	1	G	IIA X IIB	IIA X IIB	IIA X IIB	IIA X IIB	G	Summary & Closeout Plenary	LIGO Hanford Tour		
02:00 - 02:30 PM		I	I	I	I	I	I	I				
02:30 - 03:00 PM		Coffee	Coffee	Coffee	Coffee	Coffee	Coffee	Coffee				
03:00 - 03:30 PM	G	1	I	I	I	I	I	I	Summary & Closeout Plenary	LIGO Hanford Tour		
03:30 - 04:00 PM		Coffee	Coffee	Coffee	Coffee	Coffee	Coffee	Coffee				
04:00 - 04:30 PM		Coffee	Coffee	Coffee	Coffee	Coffee	Coffee	Coffee				
04:30 - 05:00 PM	G	1	I	I	I	I	I	I	Summary & Closeout Plenary	LIGO Hanford Tour		
05:00 - 05:30 PM		Coffee	Coffee	Coffee	Coffee	Coffee	Coffee	Coffee				
05:30 - 06:00 PM		Coffee	Coffee	Coffee	Coffee	Coffee	Coffee	Coffee				
06:00 - 06:30 PM												
06:30 - 07:00 PM												
07:00 - 07:30 PM		Reception and Poster and Industry	Industry Networking									
07:30 - 08:00 PM				Adam Riess Public Lecture	Physics Slam	Conference Dinner	ColliderScope					
08:00 - 08:30 PM												
08:30 - 09:00 PM												
09:00 - 09:30 PM												
09:30 - 10:00 PM												
10:00 - 10:30 PM												
10:30 - 11:00 Pm												

I → Long plenary for Primary presentation of the Frontiers (10)  
 II → Split session (two topics in parallel. Secondary presentations by Frontier (5x2)  
 G → General topic (not specific to any frontier) (7)

# Notes

- Lunch break is two hours
- There is a 30-minute coffee break in the afternoon
- Some of the evening events have been moved around and their starting time and duration may be changed
- The basic session is 1.5 hours, leaving
  - 10 full 1.5-hour sessions for the Frontiers (10 blocks)
  - 10 shared (X2) session for the Frontiers (5 blocks)
  - 7 full sessions for “global” issues
- Some modification is still possible (e.g splitting a shared block vertically)

# Some scheduling issues

- The speakers at the general session are agency or international people or members of the political system or public that have constraints.
  - They may not be able to be at Snowmass for the whole time
  - There is an ECFA/RECFA meeting on July 21, 22 at CERN so high-level CERN representatives will be available on July 24 - 26
- We do not have to have a perfectly regularly grid
- Some Frontiers may be willing to reduce their requests
  - There is some “hidden contingency”
- The Program for July 17, the start of the conference, and for July 25 and 26 (1/2 day) are still open and can possibly relieve some of this pressure
- There is no time off for touring or relaxing in this schedule

# Purpose of the various types of talks

- We envisage that the blocks labelled “I” will be where the Frontier groups deliver their main message to the entire community in simple, direct terms
  - There should be ample time for discussion, at least 30%
  - We will hold speakers to their time so that the discussion and Q&A does not get sacrificed
  - We will use ways of allowing questions to be submitted in advance and allow remote participation, with priority given to those who are attending in-person
- The blocks labelled II will be for more detailed, but still of wide interest, issues
- The blocks labelled “G” are for community wide issues,
  - including information transfer, plans from international partners, funding agencies, national and international laboratories
  - topics that are shared by all, or many, frontiers or are field-wide issues
    - Career issues
    - DEA
    - Training the next generation
    - ...

# Suggestions for Plenary Sessions Organized by the Program Committee – I

- EF
  - Full plenary:
    - The Physics case for Higgs factories
    - The Physics case for energy Frontier Discovery Machines
  - Shared Session
    - Overview of Higgs Precision measurements, and Higgs as a portal for New Physics at future colliders.
    - EWK Physics and message from global fits at future colliders.
    - Overview of Strong interactions at future colliders.
  - Highlights of BSM searches at future colliders.
  - Highlights of Dark Matter searches at future colliders
- RPF
  - Colloquium 1 (**full plenary block**):
    - Flavor physics and QCD
    - Discrete symmetries, baryon, and lepton number violation
    - Dark matter and rare processes
  - Colloquium 2 (**shared block**):
    - RPF+AMO
- CF
  - Colloquia 1: Dark Matter as a Science driver for fundamental physics (community wide, with representatives from energy, rare processes, theory, and neutrino, ~3 hours).
  - Colloquia 2: Cosmic Probes of Fundamental Physics (community wide, with representatives from energy, rare processes, theory, and neutrino, ~2 hours)
- CEF
  - Colloquium 2.5h. CEF will propose the topics and format after their April 29 meeting. This could be arranged as a panel discussion.
- IF
  - Colloquium: motivational talks about direction, technological key issues, career pipeline, facilities
  - Special CPAD Awards ceremony with invited talks by 2021 DPF Instrumentation Award winners and GIRA award winners, highlighting recent achievements in instrumentation and current key challenges, as well as career pipeline

<https://docs.google.com/document/d/11F9W5JwVZLp9JfUN7EhVUg5orycYMN0036i1saqoFrg/edit>

Snowmass SLACK channel: ssss-program-committee



# Suggestions for Plenary Sessions Organized by the Program Committee – II

- CompF
  - Colloquia 1: Presentation of the CompF Snowmass process and preliminary takeaways at the start of the workshop.
  - Colloquia 2: Presentation of the CompF conclusions at the end of the workshop.
  - Colloquia 3: [Lattice](#) Field Theory (click on link for details)
- Neutrino Frontier (2 talks to make up one 2.5 hour block)
  - Colloquium: DUNE Physics and Opportunities (60+15)
  - Colloquium: Big Picture Neutrinos (60+15)
- Accelerator Frontier
  - **Colloquium (half block): Limits of Ultimate Colliders (TBD Accelerator Expert)**
  - **Colloquium (half block): Accelerator Technology spin offs (Eric Colby, DOE ARDAP)**
  - **We also propose to move ITF report to one of the afternoon sessions (hope EF and TF and IF will support us)**
  - Colloquium/Panel Discussion: Accelerator Education, Training and Career - can be taken off (of interest to AF only) (perhaps rolled into a talk or session including also theory, computing, instrumentation???. It is an important topic)
- Theory Frontier (2.5 hours)
  - Colloquia1: Recent developments and future vision for formal theory, 60'
  - Colloquia2: Recent developments and future vision for particle theory, 60'
  - Colloquia3: Lattice (all relevant frontiers), contribute 30' from TF
  - Will assume that QIS gets its own time block shared by relevant frontiers, separate from these colloquia. JB: Yes there will be a QIS session organized by the Program Committee
- Underground Frontier
  - Colloquia Type-1: This talk would capture the exciting science done underground..This is probably not a required talk/presentation, but would help the broader community see the range of interesting science addressed in underground laboratories. Public Outreach - only 1 hour needed.
  - Colloquia Type-2: This is very optional, perhaps even not yet ready. A shared Type-2 colloquia for UF would be about long term strategy for
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<https://docs.google.com/document/d/11F9W5JwVZLp9JfUN7EhVUg5orycYMN0036i1saqoFrg/edit>

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# Categories for General Sessions – Preliminary Thoughts - DPF Chair Line

- **Domestic Program:**

- Overview from US funding agencies
- Overview from US Lab directors
- View from HEPAP and Previous P5 chairs and members
- DOE and NSF also want to do some focused activities, such as meeting with PIs to discuss grant issues
- Perhaps a perspective from some people in Government, Congress,

- **International and Interdisciplinary Program**

- Presentations and panels of foreign lab directors
- Plans and planning process in other regions and nations
- ICFA, ECFA, perspective etc
- CERN and US collaboration
- Possibly Ukraine, Russia impacts
- Collaboration with Astrophysics (DAP), Nuclear (DNP), Gravity (DGRAV), DPB (also AF)

- **Special sessions on New and Evolving Technologies**

- Special session on Quantum including academic and commercial participation. how can HEP contribute?
- Special session on Gravitational Waves - HEP community is excited about this new way to experimentally probe the universe. How can HEP make the most out of this new opportunity?
- Special session on AI – how can HEP contribute?

- **Engagement**

- STEM,
- Promoting DEI: Gender, race, sexual orientation,
- supporting people with disabilities,
- Careers issues in HEP,
- How can we encourage people to work on “enabling technologies” in HEP? Instrumentation, computing, etc
- Sustainability in the next round of HEP projects, current operations, etc,
- A report on the US Congressional visits and other outreach activities to the government,
- Outreach: do we do it well enough

# Next Steps

- Frontier plenaries
  - Another iteration, using SLACK, to specify talks in each block
- Choose specific topics and assign person or team to
  - Write abstract
  - Propose talks or panels
  - Recruit speakers or participants