Monthly Snowmass Newsletter July 2020

Organization and activities of Snowmass 2021 are available on the <u>Snowmass wiki page</u>. This page will direct you to various pages including the <u>calendar page</u> with schedules of workshops and meetings, the frontier pages with organization, activities, listserv mailing lists and Slack channels of frontier and topical groups, and <u>core principles and community guidelines</u> developed by the DPF Ethics Task Force. We encourage community members to participate in discussions on Slack frontier or topical group channels and to submit <u>Letters-of-Interest</u> (LOIs) and <u>Contributed Papers</u>.

The <u>Snowmass Steering Group</u> meets weekly and the <u>Snowmass Advisory Group</u> meets once every four weeks. In addition, the Snowmass Advisory Group, all Frontier Conveners and co-chairs of the Community Planning Meeting (CPM) and the Community Summer Study (CSS) meet once every four weeks.

Snowmass Community Planning Meeting

The CMP 2020 will be a virtual meeting and be open to everyone. The local organizing committee has been formed, and the program committee is being formed. The CMP 2020 will take place early November 2020. A draft agenda with dates will be produced in the next few weeks.

Snowmass Early Career

We had over 250 nominations come in for Snowmass early career leadership! We have reached out to all of the early career leadership nominees and defined the structure, key initiatives, and key tasks for each initiative based on feedback from the early career community and the nominees. Nominees have accepted their nominations in their areas of interest, and are beginning to meet and decide on leadership for each of the key initiative groups as well as work on immediate tasks. Key initiatives include surveying the early career membership, in-reach, long-term organization, DEI (diversity, equity, and inclusion), and Snowmass coordination. Snowmass coordination will include a few liaisons per frontier. Once the full organizational and leadership structure is defined in the next few weeks, meetings will be advertised to the whole Snowmass early career community.

Community Engagement Frontier

In June, the Diversity & Inclusion Topical Group held three productive Townhalls: one on Accessibility and two on Supporting our Black Community Members. All 6 Topical Groups of the CEF have been meeting weekly or bi-weekly for the last month, primarily focused on generating ideas for topics to be investigated during the Snowmass process. The CEF Topical Group Conveners held a mini-workshop on June 26 to develop a first draft list of working topics, which included considering overlaps and synergies between the various Topical Groups. Material, minutes, and recordings from these meetings can be found on the CEF Indico page. Our calendar of activities is on the CEF wiki. Of particular note is a community-wide CEF Town Hall scheduled for July 15, 9 AM – 12 PM CDT. We encourage all HEP community members to attend and find ways to engage on the issues in this Frontier.

Energy Frontier

The EF topical groups (TG) are meeting with their respective communities in bi-weekly meetings (see EF calendar of events), where summaries of previous works as well as new ideas are presented and discussed. We are preparing an EF-wide Workshop that is arranged in short sessions over several days. The main Workshop will take place on July 20-22, and it will be preceded by Preparatory Joint TG Sessions on July 7-8. In preparation for such a Workshop, the EF and the AF jointly arranged two meetings on June 24 and July 1 where future accelerator concepts have been discussed to develop a baseline for EF studies. Crossfrontier meetings have also been set up jointly by EF, RF (Rare Processes and Precision Measurements Frontier) and AF (Accelerator Frontier) on "Dark Sectors and Light Long-Lived Particles" on July 15-16.

Neutrino Frontier

The NF topical group conveners are meeting bi-weekly; minutes are posted on Indico. Several topical groups are organizing mini-workshops (see the Frontier calendar). Registration for the Neutrino Town Hall on July 17 is open; it closes July 6: https://indico.fnal.gov/event/43581/. Registration is required for attendance and to make comments. Questions are solicited, to be answered by conveners. Several bids were received to host the NF meeting in early 2021. Host institution and date selection are underway. It is still to be determined whether this will be virtual, hybrid or in-person. The NF conveners are also discussing joint meetings with other Frontiers. Nearly all liaisons are now in place; two remain to be confirmed.

Rare Processes and Precision Measurements Frontier

All the frontier activities are shown at the RP Frontier <u>calendar of events</u>. Rare and Precision Kick-off Workshop will take place on July 28. Registration is underway: https://indico.fnal.gov/event/44121/. RF conveners meet with Topical Group (TG) conveners weekly or bi-weekly. Joint AF5 (Accelerators for Physics Beyond Colliders) – RF5 (Charged Lepton Flavor Violation) meetings on future muon program take place weekly. We plan a set of linked LOIs on new muon program across RF4 (Fundamental Physics, EDMs). We start to discuss possible collaboration with European experiments. A RF6 (Dark Sector) meeting will take place late July, and a joint RF6 (Dark Sector) – EF9 (General Beyond Standard Model) – EF10 (Dark Matter) – AF5 (Accelerators for Physics Beyond Colliders) workshop will take place on July 15 and 16. Survey of instrumentation needs for the physics goals is in preparation. We are seeking to implement an effective liaison with the Community Engagement Frontier.

Cosmic Frontier

The Cosmic Frontier topical group conveners are meeting bi-weekly, and topical groups are in the midst of organizing kick-off meetings. All Cosmic Frontier meetings are listed in the google calendar found here: https://snowmass21.org/cosmic/start.

Theory Frontier

After the organizational meeting with all TG conveners, TF conveners held a series of small group meetings with TG conveners to finalize the subtopics to be covered by each TG, and discuss scope, dealing with overlaps, and plans for soliciting white papers. All Snowmass TG webpages are now updated to include detailed info on the TG's. SLACK channels and e-mail lists for every TG and the TF have been set up. TF has finalized all but one liaison, and are happy to welcome on board Flip Tanedo as the liaison to the Cosmic

Frontier and Devin Walker as the liaison to the Community Engagement Frontier. TF is in the process of planning a kick-off town hall meeting at the end of July. Once the date of this is finalized we will be sending out a "Welcome to the TF" e-mail to the community. We are planning an in-person TF meeting in March 2021 at the KITP.

Accelerator Frontier

The AF had a <u>Kick-Off meeting</u> on June 29th, with more than 100 people in attendance. The Frontier and topical group (TG) conveners are meeting with their respective communities in series a\of weekly and biweekly meetings (see <u>AF calendar of events</u>), where summaries of previous works as well as new ideas are presented and discussed. Jointly with the EF, we arranged two meetings on <u>June 24</u> and <u>July 1</u> where 16 future accelerator concepts are to be discussed to develop a baseline for EF studies. The first of the meetings was dedicated to presentation of the <u>collider projects which are well developed</u> (to the level of TDRs or CDRs). The <u>second meeting</u> will be for a variety of novel, efficient and promising concepts. New liaisons are appointed with CF (Jean-Luc Vay) and with NF (Laura Fields).

Instrumentation Frontier

We had the full day kickoff workshop on June 19. All topical groups presented the status and near-term plan. The liaisons also reported the current understanding of other frontiers and further engagements.

Computational Frontier

The 7 topical working groups of the Computational Frontier are starting to collect input from the community. All groups have email lists and slack channels listed on the <u>snowmass wiki</u>. During June, the "Machine Learning" (<u>Indico agenda</u>) and "Theoretical Calculations and Simulations" (<u>Indico agenda</u>) topical groups had group meetings open to the community. In August 2020, we are pleased to invite the community to our kick-off Computational Frontier meeting. The meeting will take place (virtually) on August 10 and 11. The indico site is https://indico.fnal.gov/event/43829/. At the meeting, each topical group will present its charge and plans for gathering input from the community. Please consider attending.