200612 - Computational Frontier Convener Meeting

Attendance: Oli, Steve, Gabe Perdue, Katrin Heitmann, Peter Onyisi, Wahid Bhimji, David Bruhwiler, Darin Acosta, Stefan Meinel, Rob Gardner, Michael Hildreth, Phiala Shanahan, Daniel Elvira, Walter Hopkins, Ji Qiang, Giuseppe Cerati, Daniel Whiteson, Martin Savage, Peter Boyle, Travis Humble, Gavin Davies
Agenda: https://indico.fnal.gov/event/43783/
Previous meeting notes: 200529 - Computational Frontier Convener Meeting

News

- CompF workshop
  - August 10-11, virtual
  - Indico agenda created: https://indico.fnal.gov/event/43829/timetable/
  - Need to discuss program
    - **Everyone should think about how to spend these 2 days** and then we will make this a focus of one of these meetings in the next weeks.
    - How much time per day would be devoted to the workshop. Whole day workshops are difficult to run?
      - Depends a bit on what we expect from participants. Do we expect everyone stays the entire time? Participation from outside?
    - The vision: something similar to energy and neutrino frontier kick offs; this is a way to engage and recruit.
- Suggestion to write one recruitment email to experiments and organizations, like the big HEP collaborations (experiments, …?)
  - Support for this idea - tricky to explain one subgroup outside of the context of the entire computational frontier
  - One suggestion: heavy references to the Snowmass wiki page
  - Calculations and Simulations: growing the list and it is getting close to usable. Started with contacting key people and then going from there. Still would be useful for a frontier-wide message.
  - **Steve volunteered** to lead the effort!
- Discussion of the format of the community meeting in November at Fermilab (need to provide feedback to the Snowmass 2021 executive committee)
  - Virtual or in person or a mixture …
  - Mixed can be difficult because people in the room sometimes forget about people connected.
  - Question about election day - will it be moved? There was extensive discussion about this when the days were first set, but there was definitely significant objections. If it is virtual, there are fewer constraints for the dates.
  - Is mixed meeting a mistake? 7 yes and 3 no

- Makes no sense to plan anything in person in the next ~6 months … irresponsible and unpredictable !
- We would have breakout sessions, right? (we think so … would be a bit crazy to have plenary the whole time)
- Seems like we have a **~unanimous support for 100% virtual meeting**
- Here is the link to the 2012 Community Planning meeting that kicked off Snowmass 2013: https://indico.fnal.gov/event/5841/

Roundtable

- Quick status update of all topical groups of their group building activities
- Discussion of LOI status and if we need to request specific LOIs
  - CompF1: Able to connect to various experiments and add subscriptions to the list (some issues with US CMS - see above discussion about frontier emails). Question about LOI: there are many papers coming out that are not directly Snowmass papers - how can/should those be used?
    - Add a list on our wiki for these?
    - We can definitely integrate them into our report without having a dedicated Snowmass submission
  - CompF2: See above. Planning for a meeting on June 26, 12-2 PM Pacific to try to engage with the community and ensure coverage in the 5 identified areas. The email list is rapidly expanding and will soon be an effective tool for communication.
    - High order theoretical calculations
    - Non-perturbative theoretical calculations
    - Event generation
    - Detector simulation
    - Particle accelerator simulation
    - Cosmic frontier simulations
  - CompF3: First community meeting two weeks ago. Mailing list is reasonably well subscribed. Document linked on indico which develops the themes. A second meeting will be two weeks from now to ensure LOIs that address these themes. Could put themes on wiki? Will add after next community meeting. Major themes:
    - Physics-specific ML
    - Interpretability and validation
    - Community tool and standards
    - Resource needs and management
    - Education and engagement
    - Case studies

- ○ CompF4: Unfortunately did not manage to meet since the last meeting. Trying to think about how to integrate plans for the fall with the kickoff meeting in August. Would probably want a breakout during the kickoff meeting. Any ideas about email list? Only a few so far as there has not been so much active advertisement. This is connected to the frontier email. Maybe have computing coordinators nominate specific people for the groups? Currently waiting a bit on this. Question on how to edit - information should be there - please let us know if you can't find it. Rob, Frank and others are helping the energy frontier with their computing (MC Task Force). See connect.snowmass21.io. Not directly related here, but this is great! Any other frontiers need computing resources? **WLCG should be in the list of organizations/experiments that we contact.**
- ○ CompF5: Updated content on Wiki - see link on indico. Started emailing communities / experiments. Thinking about end user survey - could piggy back on messages/surveys sent to computing coordinators. Let's revisit in two weeks.
  - ■ People often say that they don't have enough time, even if they are interested in the outcome. We should make sure there is a way to engage them even if they don't have an incredible amount of time now. Still in build up phase of email list.
- ○ CompF6: Trying to coordinate with the theory frontier on how to work on this. Ultimately will be important to work on this together. Unclear if the various topics are mature enough yet for Snowmass/HEP specific.
- ○ CompF7: Still getting organized. The number of key players is rather small - trying to think of the best ways to engage. Email list is currently underscribed - need to up the advertising.

Workflow discussion

- Workflow google doc: https://docs.google.com/spreadsheets/d/1VgZw95-YiY8cdPt6lC38YkunAvDAHMdfrtvwAph1o3Q/edit#gid=0

Notes

- Agencies / P5
  - ○ Thoughts? More information the better. P5 maybe most useful if agencies hesitant? (one of them is more hesitant than the other)

Action items

- Draft generic email to send

- Everyone think about: workshop, survey
- Next time: workflows
- ACTION ITEM: organize convener meeting dedicated to workflow discussion
  - After we reviewed the material offline to speed up discussion
  - First
- ACTION ITEM: discuss call for participation: theorysimcal has a template
  - Email was sent, changes were proposed
- **ACTION ITEM**: Additional wiki page to collect reports ➜ Oli