

## **Muon Beam Community Meeting Conveners**

Daniel Schulte, Chris Rogers, Tord Ekelof, Alexej Grudieva, Akira Sato, Antoine Chance, Christian Carli, Diktys Stratakis, Donatella Lucchesi, Elias Metral, Marco Calviani, Markus Widorski, Nadia Pastrone, Simone Gilardoni, Toru Ogitsu, Roger Ruber, Scott Berg

Daniel introduced new candidates to join the conveners. Daniel mentioned that there is an accelerator R&D road map who have initiated a road map discussion. Several panels have been formed. Aim to get a baseline in 5 years and Test facility CDR. Plan to start construction in 20 years at a minimum. Tord asked if there is a construction time estimate. Daniel replied not yet. 5-7 years is a reasonable estimate. Tord asked whether the Test Facility is at CERN and whether there is more than one. Daniel said one main test facility, but the host is not yet determined. CERN is explicitly hosting the study but could ask for another partner to take things on later. Daniel showed a parameter table. High energy is chosen as linear colliders are competitive at lower energy. Daniel identified the community meetings past and planned. Daniel promised to distribute the report sent to LDG. Introduced the Final Report structure. Tord noted that test facility was not represented. Daniel agreed, noting that the test facility report may be added depending on clarification from LDG. Daniel emphasised need to deliver R&D list, even with initial resource estimates and proposed R&D structure. Daniel showed a list of the conveners. Tord asked the meaning of the colour code – blue is in the muon beams panel and black is everyone else. **Action** Chris and Elias will merge the working group R&D challenges and distribute and also distribute the LDG short progress report.

Elias shared the link to the muon collider website, noting that other colleagues will be added as he receives confirmation from Daniel. He showed the overview of the meeting and went on to discussion of the agenda. **Action** Tord asked for Elias to please write out the full name rather than use the acronyms.

Alexej asked what would fill the plenary sessions on Tuesday and Wednesday. Elias said that the stakeholder meeting on the third day. Daniel proposed Tuesday would be working group presentation of findings. Elias proposed that we do something quite similar to the working group summaries on the Tuesday.

Chris asked if there was a need to do some joint sessions. Tord suggested for example to do joint sessions between MPC and Test Facilities. Daniel proposed that we should really understand the requirements for the test facilities. Elias asked if there should be a discussion of Test Facility on the second or third day. Daniel said yes, one hour on the Wednesday. Elias agreed. Tord asked specifically if accumulator ring at ESS is needed on 10 year time scale. Chris said it would make the diagnostics easier; but significant collimation would be required so it is not clear that we can use the muon rate. Daniel mentioned that full power target test might be useful and that it is too early to say details about the muon cooling. Also Daniel mentioned that accumulator/compressor is a challenge and work at ESS could be beneficial.

Donatella asked what kind of beam instrumentation should be used for the test facility. Daniel commented that it is challenging and dependent on the muon rate. Instrumentation will drive some specifications. For example particle physics community could be involved. Chris noted that the Monday afternoon Accelerator Design Meeting will cover test facility.

Nadia asked if the Wednesday afternoon would cover things beyond the test facility. Daniel agreed. Wednesday we would start to define a programme.

Toru asked for the magnet and RF – is there a predefined magnet and RF specification (or hope) given. Daniel said yes, there are some example parameters from the MAP study. Magnet group must go out and ask for parameters from the other groups. Chris commented that Lionel can provide

potentially numbers; failing this, please ask for help from e.g. Chris for Muon Production and Cooling or Antoine for High Energy Complex. Daniel further pointed out that the conveners list is on the website. Chris proposed sharing conveners emails. Daniel proposed adding a short sentence or two of introduction. **Action:** Elias will send an email around conveners asking for a sentence of information.

Alexej asked Daniel to please upload slides. Daniel agreed.

Elias asked us all to register.

Nadia asked if we arrange joint sessions, should we do it ourselves. Elias agreed.

Daniel reminded us that we can arrange small meetings with the working groups and invite experts from other working groups – so we don't squeeze everything into the community meeting.