

Conveners Discussion

2021-05-04, 14:00 CET

Present:

Chris Rogers
Scott Berg
Rob Ryne
Donatella Lucchesi
Shinji Machida
Alexej Grudiev
Philippe Lebrun
Antoine Chance
Jean-Pierre Delahaye
Bob Zwaska
Nadia Pastrone
Elias Metral
Roberto Losito
Mark Palmer
Marco Calviani
Alexander Zlobin
Daniel Schulte
Katsuya Yonehara

Introduction – Daniel Schulte

Daniel went over the background to the meeting. He explained the background for the LDG process and the different working groups. He noted that another working group on synergies is considered. Daniel described design goals for target parameters at the interaction point and noted that Jean-Pierre is putting together a parameter table system-by-system. He advised us to think in terms of scope at the beginning. CERN management has requested a cost scale for test facility and collider within a year if possible. Philippe noted that we need to maintain room for prototypes and other things as well as “The test facility”. Daniel agreed. Elias noted that “one or more test facilities” are noted on web pages/minutes. Daniel gave an example of “final focus magnets”. Antoine asked should we be requirements-led or technology-led? Mark commented that e.g. in final cooling system the user requirements could be expressed quite crisply. Daniel noted that it may be necessary to do two lists, in terms of requirements and technology. Alex pointed out that in MAP it was necessary to have some cross-talk between e.g. RF, magnets, etc. Daniel suggested that we could have joint discussions between different working groups. He went on to note that after community meeting we plan to have a meeting where institutes present what they would like to do (sometime in June, about 2-3 weeks after the May meeting). Anticipate EU co-funding opportunities.

Timetable/etc – Elias Metral

Elias showed the muon collider web page. Under design, he showed menu/etc. Noted that a few people are able to edit the web page. Lattice files for the collider have been uploaded, with thanks. Indico page has been updated to include more info from Daniel and updated timetable. 90 participants have now registered. Elias described breakout room which is planned for use in working group sessions. Logo and power point template in progress. A list of parameters has been prepared by Jean-Pierre. Alexej asked – should we put shared meetings on the agenda on indico? Elias – yes whatever you want. Anything is possible! Nadia – do you have an agenda for the plenary part? Elias – not yet.

RF – Alexej is chair. A first meeting was held between conveners with a short discussion on scope of working group and talks. A first preliminary timetable is in preparation. First session will be

specification of parameters. Jean-Pierre noted that the aim is to raise the technical issues. Chris and Daniel noted that potentially target and cooling could “split” by cooling → RF and target → radiation protection. Scott noted that high energy complex will also need to hold a joint session. Also noted that high energy complex and cooling will need to collaborate with the magnets group – but here targets also need to converse with magnets. Elias requests that Alexej sends the plan to Elias/Chris. Alexej agreed to send it once he finishes iterating. Donatella asks where will the interaction region be discussed? Chris suggested that it will be discussed by high energy complex and of course MDI. Daniel noted that Christian Carli will help to make the bridge. Donatella agreed while noting that they will need a joint session.

Magnets – Alexander Zlobin just got started with a couple of emails. Chris noted that high energy and cooling groups will seek to have a shared session.

High-energy complex: the group will have a meeting next Tuesday. Will make an excel sheet to fill the timetable. More details to follow.

Muon production and cooling: So far have only sent a couple of emails back and forth. Noted that Katsuya is co-convenor. Marco has proposed a slot for a meeting to discuss agenda.

Proton complex: no update (conveners unavailable)

Beam dynamics: Elias - had a first meeting without Rob. Next meeting to follow. Showed indico page for meeting on Wednesday. Mentioned CERN optics. Daniel asked what are the needs for simulation tools? Antoine asked what are the needs for optics developments? Elias pointed out that there are a number of needs e.g. isochronous rings, wakefields in matter, etc. They will discuss. Rob asked for clarification what is CERN optics? Elias described the CERN optics repository (versioning repository/etc). Daniel noted possibility for someone at CERN who can support lattice admin. Simone emphasised it is very important to have a repository for the optics. Elias and Chris agreed.

Radiation protection and other technologies: the group plans to have a meeting tomorrow (Wed 5th) where they will enumerate the other technologies. Main aim is to collect requirements/etc from other groups. They asked whether there will be a discussion of test facilities in working groups? Chris said yes, cooling will. Daniel noted the need to think about how we do “moving the machine” for radiation protection of neutrino radiation. Nadia commented that she has been discussing MDI and asked if she should we participate in meeting tomorrow? Roberto commented that it will not be necessary immediately, but conveners will discuss among ourselves and then send out invitations/etc.

MDI: meeting scheduled for later today (Tues 4th). Cross-meetings will be with high energy, magnet, radiation protection.

AOB

Elias asked what is Daniel’s feeling on the progress? Daniel commented it looks very impressive.

Elias noted that he received only one request for a seminar.

Nadia presented MUST at iFAST. Has been asked to work in synergy with the road map and not repeat the work. Daniel agreed that MUST can be used to great benefit. Elias asked do we re-organise a conveners meeting next week? Agreed that we should plan one in, even if we cancel it in the end.