

Minutes of WP-meeting 308

Attendance:

DESY: Ralf Diener, Leif Jönsson, Paul Malek

Vidyo: Yumi Aoki, Paul Colas, Keisuke Fujii, Qi Huirong, Jochen Kaminski, Uwe Krämer, Kees Ligtenberg, Tomohisa Ogawa, Ron Settles, Akira Sugiyama, Jan Timmermans, Keita Yumino

General News:

Paul presented the current status of the IDR. First he showed the path of the cooling pipes in figure 6.19, where the diameters of the pipes were wrong before. The diameter of the incoming pipe for the liquid coolant is 5 mm and for the outgoing vapor the diameter is 8 mm. Then the various sections regarding the TPC were discussed. On page 16 there is table 5.1 with an overview over the size and the performance of the subdetectors. It was discussed, if also the GridPix option should be mentioned here, but it was felt, that first of all only the baseline options and not alternatives should be mentioned. Besides, the numbers on the performance are difficult to compare with the ones for the pads. Finally, the GridPixes are discussed in the accompanying text on page 20. Ron pointed out that we should revisit the classification in baseline and alternatives. The current one was done about 10 years ago and the significant progress of the GridPix devices should be taken into account. Also the question if the Japanese GEM-modules should be mentioned was discussed. But since the performance is very similar to the DESY module and during the last review we got the explicit request to unify the GEM technologies, it does not seem a good idea to state, that we still work on two different GEM technologies. In section 5.2.3 the status of the technologies are discussed. First the LP-setup in T24a is described and then the three technologies: GEM, MM and GridPix. Here the performance regarding the spatial resolution and dE/dx are shown. Ralf promised to send Paul C. the results of Oleksiy Fedorchuk thesis which should be published soon on the 2 track resolution. As remaining challenges the cooling of the end plate and the reduction of the ions are mentioned. Then in section 6.2.3 the integration of the TPC is discussed. Here the two different mounting schemes (from solenoid or HCAL) and their implications are mentioned. Paul wants to add the deformation of the TPC due gravity. Then in section 6.2.4 the distribution of the electrical power and coolant at the endplate is shown. The final picture on the distribution of the services on the detector platform, gallery and surface was discussed. In particular it was pointed out, that floor space for the VHV (cathode), LV and cooling units should be claimed as it becomes more difficult to claim it later on.

Also the bibliography was updated. The IDR should be committed before end of August and the final version be published before the LCWS in Sendai. So please read the document and send any comments to Paul and Akira in July.

Keisuke gave a short summary on the political status in Japan. The advanced accelerator association is sending a delegation of the discussion group including 2 diet members and the KEK DG to visit France and Germany at the beginning of July to start the discussion on prime minister Abe's large scale research policy. The international working group on the ILC has met already twice and will also meet at the beginning of July to start drafting a report, which can be shown to MEXT, DOE, LCB, etc The final report is expected for September. The Masterplan Physics Subcommittee has met to scale the physics projects. End of July it will be made public, if the ILC advances to the hearing stage. This is the minimal requirement to be satisfied in the Masterplan process to get the green light. The hearing will be in September.

The information is also summarized in <http://newline.linearcollider.org/2019/06/27/final-countdown-to-the-decision-making-process/>

Huirong reported that in April a new series of meetings was established in China, a monthly 'CEPC working day'. Here new results on CEPC studies are presented. Unfortunately, the community still has to continue without any budget at the moment. The 2019 funding period will be distributed in the end of July and the giant projects funding date is still unclear.

The next large conference on CEPC is a Workshop at Peking from 18-20 of November.

Huirong also mentioned a new project, which is discussed in the Chinese HEP community: A new tau/charm factory close to Shanghai.

PCMAG/LP setup, test beam:

Ralf: PCMAG/TRACI/test beam area:

- The θ -rotation of the stage is broken at the moment. The engineers are looking into this to repair it as soon as possible.

Test beam schedule:

- Ralf said that Uwe will have the next test beam in 2 weeks.

News from the groups:

Paul said, that the T2K test beam went very well. Several groups not only from Saclay, but also from Italy etc were participating. Now the focus is on the analysis. They are reconstructing the waveform and Paul expects that many things can be learned from that. T2K will start to build the final detector soon.

AOB:

A new discussion process on a followup project of AIDA2020 started and a first meeting will be held at CERN at the beginning of September.

The next workpackage meeting will take place on July 11th.