

## Minutes of WP-meeting 427

### Attendance:

Zoom: Paul Colas, Jochen Kaminski, Shinya Narita, Huirong Qi, Oliver Schäfer, Ron Settles, Jan Timmermans, Kanako Watanabe

### General News:

Jochen discussed the date of the CM. For DESY, there is only one choice in January: 15<sup>th</sup> and 16<sup>th</sup>. An alternative is to make the CM in Bonn. Jochen will send a doodle. Paul has contact to ALICE and Alexander Schmäh of GSI will give a presentation at the DRD1 meeting. Paul will ask him to give also one at the LCTPC-CM.

Paul and Huirong reported on the IDRC meeting. The draft of the IDRC report is written and being finalized. The general detector layout is based on a simple design with very advanced technologies such like a pixelized TPC. Currently, 500 $\mu$ m pixel pitch are foreseen, but this has to be optimized still. There are also some new developments: during the 10 years of Higgs running there will be short runs at the Z-pole. This is possible because of a new magnetic field design, where the compensating solenoids are further apart. Also a B=3.5 T running at the Higgs is possible with this new design.

Huirong is writing the chapter on the TPC for the reference TDR and will set it up as an overleaf document and share the link. Having finished the draft of the document he will restart the test measurements necessary to demonstrate the feasibility of the pixelTPC. He wanted to do a test beam at DESY, but this will be too late (see below). He will therefore do the important tests with cosmics and laser tracks in the lab. He will restart the R&D activities next months, when the first draft of the reference TDR is finished.

Because of a new program director, the IAS conference is reduced to a 1 week event (<https://indico.cern.ch/event/1454867/>) with an explicit focus on quantum physics and gravitational waves.

There are many meetings with regard to the ongoing ESPP. There is currently one in Germany and there are also many scheduled in different labs in France.

Manqi Ruan is currently at KEK and gives a seminar on the CEPC.

Shinya mentioned, that there will be a technical coordinator meeting tomorrow.

### PCMAG/LP setup, test beam:

Oliver: Test beam schedule:

- Oliver said, that the test beam is up and running again. The electronics was switched on on November 18<sup>th</sup> and the first beams were circulated on November 20<sup>th</sup>. Then on November 21<sup>st</sup> everything was back to normal and in operation.
- The schedule is quite dense at the beginning of next year. Huirong had applied for a test beam, but will not get time before April or May. He will come to DESY in January or February nevertheless to see, if his module fits into the LP endplate and all the necessary cabling can be done.

News from the groups:

Jan gave an update of the status of the papers on the pixelTPC test beam. The first paper submitted to NIM has been reviewed a second time. One of the two referees is very picky and claimed that his first comments had not been answered sufficiently. Therefore, the second paper is delayed.

AOB:

Oliver reminded about Leon, who had built the wire chambers for the winning team of beamline for schools last year. Leon had turned his project into a school project and first won the school competition, then the national competition and finally placed second in the European competition. With the price money he will travel to Japan and visit KEK. Oliver has made contact with some people at KEK and is organizing various tours for Leon (Belle2, CDC, ILC facility, ...). Therefore, Oliver asked, if any TPC equipment is left at KEK, but it seems everything was shipped to Iwate.

The next workpackage meeting will take place on December 19<sup>th</sup>.