

Minutes of WP-meeting 425

Attendance:

Zoom: Jochen Kaminski, Huirong Qi, Ron Settles, Jan Timmermans

General News:

Huirong reported about the IDRC review meeting from 21st-23rd of October, when an international committee gave feedback to the process of the reference TDR. 16 presentations on the different subsystems were given. Both Peter and Huirong gave presentations on the gaseous trackers and the pixelTPC. The first draft has to be written until the end of the year.

During the IDRC an occasional low luminosity Z-pole running at $B = 3T$ during the first 10 years for calibration purposes was discussed. Some people voiced the fear, that the TPC could have problems running at these rates ($L \sim O(10^{35} \text{ 1/cm}^2\text{s})$). This has to be studied in more detail with simulations, but the people attending the meeting agreed, that it should be possible to operate a TPC.

There were 6 comments given by the IDRC as a feedback to the TPC group:

- 1.) A detailed simulation is necessary to study in particular the pixel/pad size
- 2.) IBF has to be reduced, so that track distortion at the low luminosity Z-pole running is as low as possible
- 3.) study and reduce beam backgrounds
- 4.) mechanical alignment has to be very precise to avoid systematic effects
- 5.) T0 has to be determined very precisely
- 6.) Protection of chips against discharges.

Huirong will work on these items as soon as the draft of the reference TDR is written. There will be additional funds of 1.12×10^9 Renminbi Yuan over 4 years to develop detector technologies from the local government. To propagate the pixelTPC at CEPC it was agreed, that Jochen will give a presentation in the next ILD meeting. Huirong will prepare the slides for this.

AOB:

The next workpackage meeting will take place on November 14th.