Minutes of WP-meeting 259

Attendance:

DESY: Ralf Diener, Ulrich Einhaus, Oleksiy Fedorchuk, Claus Kleinwort, Felix Müller, Dimitra Tsionou

Vidyo: Qi Huirong, Jochen Kaminski, Peter Kluit, Ron Settles, Akira Sugiyama, Jan Timmermans

General News:

Jochen announced, that the updated list of planned projects is attached to the agenda. Everyone is invited to have a look at the list and send him comments.

Huirong said that soon a Post-Docs part-time and 1-2 PhD students were available in his institute to contribute to LCTPC and that they were interested in working on the gating device. They plan on making setup to generate an ion disc by shining UV-light on the cathode and releasing electrons from there. They could also participate in the module design by simulating some new ideas to decrease the field distortions at the boundary.

The AWLC webpage is <u>https://portal.slac.stanford.edu/sites/conf_public/AWLC17/Pages/default.aspx</u> but very little information has been given sofar.

News from the groups:

Dimitra had looked into the DD4HEP implementation of the TPC. She had listed the spatial resolution in detail. The resolution in r ϕ is rather similar to our current best knowledge with the T2K gas. However, the resolution in z is worse. Besides, the formulas, which vary the spatial resolution in dependence on the drift distance, were difficult to understand and did not show the known behavior at first sight. This needs more scrutinizing and there is now dependence of the z-resolution in dependence on the inclination. So, some modifications need to be done. Keisuke suggested that the old formula should be kept as an option since a large data set of simulated events are available from the DBD-production and are used for the large/small detector detector study. Therefore, it was suggested to leave the current implementation as a default and implement a more correct version as an alternative, which will become the default value, when the ongoing studies have been finished.

AOB:

The next workpackage meeting will take place on March 16th.