

Minutes of WP-meeting 260

Attendance:

DESY: Ralf Diener, Ulrich Einhaus, Oleksiy Fedorchuk, Claus Kleinwort, Uwe Krämer, Paul Malek, Oliver Schäfer, Dimitra Tsionou

Vidyo: Qi Huirong, Jochen Kaminski, Ron Settles

General News:

Ron had joined the last ILD vidyo meeting, but there were no issues regarding the TPC community. ILCSoft and Marlin are now in a git repository, but MarlinTPC remained in the svn. This is partially because we have no software coordinator responsible for MarlinTPC. Please, try to find someone!

PCMAG/LP setup, test beam:

Ralf: PCMAG/TRACI/test beam area:

- The beam area is empty and the DESY group uses the time for maintenance. One of the stage drivers is broken and replacement is ongoing.

News from the groups:

Qi gave a short overview of activities of his group. There are two PostDocs working part time and two PhD students working full time on TPC issues for CEPC. Most importantly the CEPC has a time structure with bunch crossings every 90 μ s. Therefore the ion distribution is different, more than 10,000 thin ion discs are in the volume. Thus, at IHEP a module with both a Micromegas and an amplification GEM are studied. Qi showed results from first measurements. The gain curves of both amplification structures were measured independently. They have also acquired a Deuterium UV lamp (wavelength 160-400nm) to knock out electrons from the Al-cathode. First tests with this lamp have shown an increase in current depending on the electric drift field. In the next step the time structure of both the CEPC and the ILC shall be simulated and gating devices will be implemented the test detector to verify the efficiency of these.

Dimitra reported that she has updated her transparencies of WPmtg259 regarding the DD4HEP implementation with the correct formulas. Please, have a look at them again and see if this implementation of the TPC is correct or should be modified.

There will be an ILD Software meeting at the beginning of April in Lyon. It seems they will discuss the ILD implementation of the large and small detectors design, so that both detector model can be signed of for Monte Carlo production for the large/small study. Feedback to Dimitra is therefore very important.

AOB:

The next workpackage meeting will take place on March 30th.