

Minutes of WP-meeting 172

Attendance:

DESY: Ties Behnke, Andrii Chaus, Frank Gaede, Isa Heinze, Leif Jönsson, Jochen Kaminski, Felix Müller, Astrid Münnich, Volker Prahl, Oleksandr Volynets, Klaus Zenker

Fuzebox: Alain Bellerive, Paul Colas, Keisuke Fujii, Philippe Gros, Michael Lupberger, Takeshi Matsuda, Dan Peterson, Nicholi Shiell, Ron Settles, Jan Timmermans, Wenxin Wang

General News:

Paul reminded everyone that from 10th to 12th of April there will be the 2nd annual AIDA meeting at Frascati, and that all groups should give a status report. Since no-one from Bonn or Lund will go there, it was agreed, that Felix will receive the respective slides and cover the projects in his presentation.

PCMAG/LP setup, test beam:

No news, the Bonn groups is taking data.

News from the groups:

Jochen reported on the status of the Bonn test beam campaign. Everything is going smoothly at the moment. During the first week data was taken with the InGrid module. On Tuesday the modules were changed and the triple-GEM modules was placed in the LP. After flushing with gas data taking has successfully restarted this morning.

Oleksandr summarized his work on adapting Clupatra for the data taken with the Large Prototype. He gave a detailed overview of Clupatra and its interplay with the ILD and Marlin tracking code. He explained the 4 steps of the Clupatra algorithm: 1. tracks are searched in the outer part of the detector and then propagated to the center, 2. if tracks are close to each other, the falsely merged clusters are split, 3. track segments of split tracks are merged; this happens in particular, when bent tracks cross other tracks, 4. merging track segments of curlers. He then discussed the modification necessary to use Clupatra also for LP data and showed several events from 1 and 3 modules, where tracks were reconstructed with Clupatra. Most events are well reconstructed, but in the presents of noise or wrong initial setting (e.g. χ^2 -requirements) results may be less satisfactory. Therefore, checking with the CED-viewer is definitely recommended. The new algorithm is also significantly faster compared to the Pathfinder package if a Helix-model is chosen, but performs similarly fast, if straight tracks are used in Pathfinder.

Andrii showed the Saclay setup to test InGrids and gave the results of the 4 InGrids he tested. All 4 of them are of the IZM-3 production cycle. 1 Chip didn't work electronically, 1 chip worked very nicely, but showed several inefficient areas, the third chip suffered from continuous discharges at one position and the fourth chip seems to have a very low gas amplification. Even at high gas gains only few primary electrons were observed. This could be explained by too high pillars and will be investigated soon by studying the pillar eight with a microscope.

Dan summarized the discussion on the new endplate delivery. Current plans are to deliver the endplate before the ECFA-LC2013 workshop and to discuss installation and handling during the workshop, when Dan will be present at DESY. He pointed also out, that the new endplate has nor fun holes any more. In the following discussion it was observed, that this has no effect on the mounting of the LP inside PCMAG, since the LP only rests on the sliding frame, but is not fixed to it. However, it is not

clear yet, if the mounting arm built at DESY can be operated as planned, or if the mounting procedure has to be altered.

Takeshi reported that the 2pCO₂-cooling plant was delivered from KEK to NIKHEF in the week before Easter. Unfortunately, there were problems during the assembly of the plant and the gear pump has to be replaced by a membrane pump. The procurement of the new pump will delay the availability for use of the plant a bit. The current schedule foresees tests at NIKHEF until May. It will be delivered to DESY at the end of May and installation and a demonstration are planned for the second week of June (6th and 7th of June – after the MM-test beam).

AOB:

Everyone interested to go to the MPGD2013 should send his abstract to the speakers' bureau. The speakers' bureau will check only for duplications, but will not recommend or reject presentations. The next workpackage meeting will take place on April 18th.