Minutes of WP-meeting 149

Attendance:
DESY: Leif Jönsson, Jan Timmermans, Paul Colas, Felix Müller, Stefano Caiazza, Klaus Zenker, Ralf Diener, Isa Heinze, Volker Prahl, Christoph Rosemann, Jochen Kaminski
Webex: Ron Settles, Martin Killenberg, Madhu Dixit, Andrii Chaus

General News:
Jochen reported on the ECFA Detector R&D panel. The indico page with the presentation is available at: https://indico.desy.de/conferenceDisplay.py?confId=5800
There were only two comments on the LCTPC presentation. One panel member suggested to study the longterm and aging properties of the connection between resistive layers and ground. The other question from the audience inquired the additional benefits from InGrids.

PCMAG/LP setup, test beam:
Ralf: PCMAG

- During the visit of Makida san and Kawai san to DESY, the PCMAG was carefully checked and a to-do list with additional preparations for the commissioning was written. DESY is working on this list and will finish before May 20th, when Kawai san returns to start the cool-down. Ten days later the magnet should be cold and Makida san will arrive to start the commissioning and tests. This should last until the end of June.

Ralf, Paul, Felix: test beam schedule:

- Paul would like to take data with 7 Micromegas module directly after commissioning and testing of the PCMAG has finished. He estimates that two weeks of data taking will be sufficient. He would like to start at the beginning of July and end at the mid of July because this is the latest date, which does not collide with conferences and French vacation time. Before the test beam he needs several days to set every thing up (cables, fibers, cosmic trigger, ..), that is why Paul would like to start in the last week of June to prepare everything.
- The DESY module is likely to be ready for data taking in the LP by August.
- Also the Japanese are planning to have their next modules prepared for late August, beginning of September.

Ralf: Large Prototype:

- On of the three screws fixing the metal plate of the cathode to the frame was loose and allowed the cathode to move a little. The screw was tightened, but the cathode has to be surveyed again.

Leif: ALICE experiment is planning to rebuild partially its TPC-readout with GEMs. For this they are equipping their full length prototype sector with a triple GEM-stack panels and plan to finish at late June. However, their electronics is not compatible with negative signals. That is why, they asked, if they could borrow some of our FECs for tests. At the beginning they would need only 5 FECs, later this year they would need 40-50 FECs. Leif has answered, that this may be possible under 2 conditions: 1. it should not interfere with tests of LCTPC at the LP, 2. if something breaks, they have to pay the repair.

News from the groups:
Paul: - Progress on the production of the 9 modules is slow: 2 detectors are ready 7 still need assembly. The noise level of the finished detectors is excellent (3 ADC counts). A mistake on the FECs

was discovered and the production of the boards has been relaunched.

- Paul also welcomes the idea of reading out a Micromegas module with the ALTRO electronics. He will supply the module and information of the channel mapping. A small connector adapter has to be designed, which bridges the 80 pin connector of the AFTER electronics (72 signal pins) to the 40 pin ALTRO electronics (32 signal pins).

Felix: - All components for the triple GEM module have been ordered. Most of the components have arrived and are being tested. Sofar, everything looks good.

Leif: - Philippe will come to Lund for discussions on cooling. His simulations look very promising, but a few things have to be discussed and decided. For example the connection of the chips to the cooling layer is not clear yet.

- The 60 pin connector between the MCM and BC of the SALTRO electronics is a Panasonic connector. The Japanese colleagues are contacting the vendors to see what they cost and what the delivery time is.

- DAQ: To use the EUDAQ with the new SALTRO-16 electronics, some details have to be changed in the TLU. Leif is in contact with Brussels and he will make a wish list of upgrades. If these upgrades will be implemented in the next version of the TLU, then the EUDAQ can be used.

AOB:

The next workpackage meeting will take place on May 22nd as a pre-meeting in Fukuoka.