Minutes of WP-meeting 220

Attendance:
DESY: Deb Sankar Bhattacharya, Ralf Diener, Serguei Ganjour, Leif Jönsson, Paul Malek, Felix Müller, Volker Prahl, Oliver Schäfer, Dimitra Tsionou, Annika Vauth, Klaus Zenker
Fuzebox: Alain Bellerieve, Jochen Kaminski, Takeshi Matsuda, Amir Shirazi, Ron Settles, Jan Timmermans

PCMAG/LP setup, test beam:
Ralf: PCMAG/TRACI/test beam area:

- The precision and reproducibility of the moving stage is under investigation. The first impression is, that the calibration of both horizontal and angular movements have small errors (~<1 %). The movements are controlled by an external measuring device with a precision of 10 µm. Table is moved back and forth several times and also rotated several times and the deviation from the original position recorded. It was again observed that for angles below 28° the table rotates back by 0.1° and for angles between 29° and 45° it rotates back by 2°-3°.
- DESY is in contact with the Vienna group (Stefan Henseler). 3 working sensors of the same type as the last external tracker are available and have been sent to DESY. They are one option for the new external tracker. They can reach a spatial resolution of 8 µm, which is just within the limits of our requirements.

News from the groups:
Deb and Serguei have visited DESY and have been discussing two issues with the DESY group.
- Deb is preparing contributions to the 2 track separation together with Jenny. He is preparing a study, in which he uses the particle gun of Mocca to shoot γ, K_S, and τ in the TPC. This should cover the major physics cases. The electrons are the drifted to the endplate. He will then see at which distance they can be still separated. Deb has installed Mocca and will start with the preparation of the simulation.
- Serguei met with Felix and Oliver to discuss the alignment of the Micromegas modules. The alignment of the GEM modules was done with the GBL-fitter and Millipede. Serguei is now at the final step to produce feed back the corrections in the GEAR file.

Alain announced that the student doing simulations of 2-track events has started. Of course he needs some time to learn the program, but then he will produce pileup events. Ultimately, a processor should be produced, which can discriminate between to pulses, even if they overlap. This should be even independent of the technology. To test this processor, Alain will provide simulation data, but there should also be enough data from the LP, where 2 tracks are close enough to test it.

AOB:
It was suggested by Takeshi to go over the list of open issues posted on the agenda of Wpmtg 219 in more detail in one of the next meetings and possibly prioritize it.
It was also reminded that we have a central MarlinTPC wiki (https://wiki-zeuthen.desy.de/MarlinTPC/) and this should be used. In case you encounter problems please let the DESY group know.
The next workpackage meeting will take place on June 4th.