

## Minutes of WP-meeting 277

### Attendance:

DESY: Leif Jönsson, Uwe Krämer

Vidyo: Yumi Aoki, David Attie, Paul Colas, Keisuke Fujii, Qi Huirong, Jochen Kaminski, Tomohisa Ogawa, Aiko Shoji, Akira Sugiyama, Sergey Suvorov, Jan Timmermans

### General News:

Akira had forwarded an invitation email to the AWLC2018 in Fukuoka. Since the meeting will be in the omnibus style again, Jochen asked, if the next Collaboration meeting should be done there. No-one objected, but Jochen will ask in an email a wider audience. The final decision will be taken in the next WPmeeting.

In this context Jochen reminded that soon there will be many abstract deadlines for conferences in spring and summer.

Paul announced that in January and February a series of ILD related meetings will take place. On the 11<sup>th</sup> of January there will be a convenors' meeting, where the next version of the ILD integration documents will be discussed. Paul will finalize a new version of the TPC document before, but needs input from Hironq and Dimitra. In February several meetings will be in Japan: first an ILD meeting at KEK, then an integration meeting and finally an ILD infrastructure meeting on the 23<sup>rd</sup>.

### News from the groups:

Leif summarized the status of the SALTRO planning with respect to the common module layout. He showed some ideas how the MCM boards could be arranged on a module in a 5×5 array. Because the ASICs will be packaged now, the MCM boards have to be redesigned, so one has to wait, until the final size is known. In total there should be space for 3200 channels. Leif also showed some ideas on the cooling of the chips and how the cooling pipes could be arranged.

Paul gave some suggestions regarding a common module. He prefers pad sizes of  $1.1 \times 7 \text{ mm}^2$  with no staggering. The pads should be arranged in a square preferentially with powers of 2. For an empty frame around the pad area, Paul suggests 8.8 mm in x-direction and 7 mm in y-direction.

Sergey showed some first results on dE/dx measurements with the Micromegas modules. He used the data taken in 2014 and 2015 both with the 7 module setup. He used the method of truncated mean and showed, that truncating 30 % of the highest charge clusters gave the best results. He then used the central module of the 2014 data for several studies. With this single module he reached a dE/dx value of 16 % both with and without a magnetic field of  $B = 1 \text{ T}$ . Also the result was independent of the drift distance and only row dependence could be observed, which was calibrated. An extrapolation to a full LD-TPC performance was done by combining 8 tracks. This gave a dE/dx resolution of 6 %. The data of 2015 had some missing connections to pads which required that these pad rows were removed from the analysis. Tracks passing over all three modules had a dE/dx of about 9% which is consistent with the 2014 data.

### AOB:

The next workpackage meeting will take place on January 11<sup>th</sup>.

The analysis meeting will also restart in January with the new convenors Paul and Peter.