

## Minutes of WP-meeting 160

### Attendance:

DESY: Isa Heinze, Leif Jönsson, Felix Müller, Astrid Münnich, Volker Prahl, Christoph Rosemann  
Webex: David Attie, Paul Colas, Jochen Kaminski, Takeshi Matsuda, Dan Peterson, Wenxin Wang

### PCMAG/LP setup, test beam:

Felix and Astrid: LP:

- DESY test beam has finished shortly after the last workpackage meeting (details see below). Among other things, they will tackle the HV-problem at the cathode now.

Test beam schedule:

- Takeshi reports on the test beam plans of the Japanese groups: First group will arrive on the 19th of November at DESY. The modules will be tested in the beam area with a radioactive source during the first week. Then, in the second week they will be mounted on the LP and the electronics will be mounted by the Lund group. At the beginning of December data taking is planned to start and last until the 20th of December. The Japanese plan to use the same modules as last time, so everything should work, but they will use the remaining time at Japan to optimize the voltage settings of the field shaper so that the field distortions should be minimal. For this they will also use their laser set up. For the data taking period a total of 10 people will come to DESY, but not everyone will not stay all the time. Takeshi will arrive on the 22nd of November and will stay until the 19th of December.
- Astrid reports that there will be a test beam of CALICE at T24 from the 5th to the 12th of November.
- Paul would prefer to make a second test beam at the beginning of next year as soon as possible, that is, when the test beam is available. He requests about 10 days of beam. Wenxin needs the data to finish her thesis in April.
- Also DESY requests would like to make another test beam early next year.
- Jochen also made a request for the pixel community (Bonn, NIKHEF, Saclay), to make a test beam with at least one eight chip module at spring next year.
- Next year, however, the beam time will be rarer, since CERN's test beams will shut down and more groups will use the DESY test beam.

### News from the groups:

Felix and Astrid reported that after installing the three modules shortly before the last WP meeting, tracks passing across all three modules could be recorded. But after a few days the pulse heights started to decrease. It was found, that the modules had developed gas leaks. It is assumed that the structures pressing the Kapton cables onto the modules exert a too strong pressure on the modules and therefore the PCB has detached from the backframe creating gaps.

Paul shared a few very preliminary results of the July test beam. He showed a few example tracks and reported that the gas gain was within 50 % of the one previously taken with an  $^{55}\text{Fe}$ -source. He also showed results of the x-scan, where in the cracks between the two modules in the lower and upper module row the efficiency is not zero for tracks passing over the cracks: These tracks should have clusters on two modules only ( $2 \times 24$  rows = 48 clusters), but they consist on average of more than 50 clusters. The number of clusters per x-scan position has a 1 cm wide dip of lower efficiency where the number of clusters drop from 70 to 50 and then rises back again.

### AOB:

Despite the LCWS the next workpackage meeting will take place on October 25<sup>th</sup> an hour later than

usual.