

Minutes of WP-meeting 208

Attendance:

DESY: Ralf Diener, Oleksiy Fedorchuk, Claus Kleinwort

Fuzebox: Alain Bellerive, Keisuke Fuji, Takahiro Fusayasu, Jochen Kaminski, Michael Lupberger, Takeshi Matsuda, Rashid Mehdiyev, Tomohisa Ogawa, Amir Shirazi, Ron Settles, Akira Sugiyama, Jan Timmermans

General News:

Yesterday was an ILD optimization meeting and there was a presentation by Tomohisa on the optimization of the TPC radius with a full SVG simulation. The presentation can be found at: <https://agenda.linearcollider.org/event/6561/>

PCMAG/LP setup, test beam:

Ralf: PCMAG/TRACI/test beam area:

- The area is being prepared. There are still some things to be installed and improved at the stage.

LP:

- The new endplate is also worked on, but an aluminum ring with a groove is still missing. This can not be done at DESY, since the size is too large and has to be given to industry. This may delay the use of the new endplate a bit.

Test beam schedule:

- The test beam will restart in January – most likely on the 19th. The two beam lines with the beam telescope are strongly requested, but there is still some open dates at T24.

News from the groups:

Jochen gave the status of the new InGrid module which shall be tested early next year. Most of the parts are in house, but some are only prototypes which have to be tested before ordering the final batch. The longest delays are in the InGrid production. There were several problems with the IZM-6 batch and to have enough InGrids both IZM-5 (8 μ m) and IZM-6 have to be combined to get enough.

Ralf reported that the bending test for the next field cage have started now. Today an aluminum piece with known bending behavior was tested in the setup to verify that everything works correctly.

Tomorrow, the first test samples will be mounted on the machine and bent. Oleksiy has started to study the discharge behavior of single GEMs. For this he has connected the sectors of a GEM to a CUMO and raises the HV to provoke discharges. He observed, that there are double discharges, where two sectors discharge very shortly one after another. They can not resolve the time difference, because it is faster than the sampling rate of the CUMO. He wants to film the discharges now, to find out where they happen. It is likely to be at the edge of the GEMs.

Akira reported that the tests of the GEM gates in the magnetic field was successful and is in good agreement with the simulations. Ikemat will give a report in two weeks.

Amir has solved the problem with the simulation and is now working on the reconstruction with the Fast Hough Transformation.

Rashid is now at CERN and working together with Serguei on the analysis of the Micromegas data. He is focusing on the 2010 and 2014 data. Currently he is studying the effects of misalignment, field distortions and biasing and is disentangling them. He is also studying the z-resolution.

Alain also reminded of the ILD optimization effort and the meeting yesterday where the effect of

different radii was discussed. We should have some periodic reports on the optimization in the WP meetings.

Jan is still waiting for a test box to be produced by the NIKHEF workshops. Because of changing prioritization, the work was several times delayed. In the mean time Jan is preparing for his new job as chair of the Institution Assembly.

AOB:

The next workpackage meeting will take place on November 27th.