

Minutes of WP-meeting 159

Attendance:

DESY: Ties Behnke, Ralf Diener, Isa Heinze, Astrid Münnich, Volker Prahl, Klaus Zenker
Webex: David Attie, Christoph Brezina, Gilles de Lentdecker, Klaus Desch, Jochen Kaminski, Keisuke Fujii, Philippe Gros, Martin Killenberg, Markus Köhli, Takeshi Matsuda, Michael Lupberger, Dan Peterson, Akira Sugiyama, Jan Timmermans

Discussion on DBD:

Ties reported that a first draft of the DBD should be sent to IDAG on the next day and that the collaboration should comment on and finally approve the pictures that go in. These pictures uploaded to the agenda were discussed and it was felt, that the residual plots of the Asian test beam showing the field distortions before and after correction should not be shown, since it could give a wrong impression and would require a too long explanation. The same is true for the plots showing the momentum resolution. Since they are dominated by the momentum spread of the test beam, they were felt to be misleading. The remaining pictures were approved and higher resolution versions were requested in some cases.

PCMAG/LP setup, test beam:

Ralf: PCMAG:

- The vibrations of the magnet caused by the cryo-coolers were measured by a DESY group. Preliminary results showed mean amplitudes of 10 μm with a frequency identical to the one of the cryo-coolers. The full analysis will be presented in one of the next meetings.

LP/Test beam:

- After the last meeting the test beam with the DESY-module continued stably until last Saturday, when an x-scan of the module was performed close the edge of the module. At that time the cathode voltage was 15.5 kV and 2250 V was the highest voltage of the GEM-stack. The drift distance was $z=5\text{cm}$.
- On Sunday a second x-scan was performed at a longer drift distance. During this measurement the field cage tripped (most likely because of a power glitch) and since then, the field cage can not be ramped to the nominal voltage. It was decided not to open the field cage, but to continue at a lower drift field of $E=135\text{ V/cm}$, which is the field of lowest diffusion. It requires a potential of 10 kV at the cathode, which the field cage still stands.
- The 10 M Ω resistors, which were installed on the shields and dummy-modules proved very helpful and no further sectors of the GEMs were destroyed.
- After this all three modules were installed on last Monday. The top most is lacking the 2 lower sectors and a second modules is missing one sector. This module was placed so that the damaged sector does not influence the data taking. Simulations of Klaus Zenker showed, that the two damaged sectors of the top module do not create field distortions affecting the tracks on other modules. Cabling took until Wednesday evening and data taking restarted this morning. Already 4 runs have been taken and everything is working well.
- On Saturday Ulf has to return to Lund. In case everything runs stable until then, he will brief the DESY colleagues how to use the ALTRO electronics. Then the test beam could continue for another week.

Report from the European Strategy Meeting at Cracow by Klaus D.:

Klaus split the report in two parts. In the first part he explained the reason and the procedure of the

meeting and in the second part he summarized the discussion concerning the ILC and the HEP community in general. He pointed out a few general highlights of the discussion. He reported on the Japanese ideas of building the ILC and the general reaction of the community to it.

AOB:

In the context of DBD everyone was asked again to summarize his work in a LCTPC note, which can then easily be quoted in the DBD. Currently, the LCTPC notes still have to be sent to Ralf and will be uploaded to the LCTPC-web page. Ron is making backups of the webpage. Once the DBD is finished, all LCTPC notes will be included in the EDMS system.

Also all speakers of past conferences were asked to send their presentations and proceedings/papers to Ralf, so they could be posted on the LCTPC webpage.

The next workpackage meeting will take place on October 11th.