Minutes of WP-meeting 322

Attendance:
DESY: Ralf Diener, Leif Jönsson, Paul Malek
Vidyo: Yumi Aoki, Paul Colas, Ulrich Einhaus, Keisuke Fujii, Qi Huirong, Jochen Kaminski, Shinya Narita, Tomohisa Ogawa, Ron Settles, Akira Sugiyama, Jan Timmermans, Keita Yumino

General News:
Jochen first mentioned the ICFA statement from 22nd of February. He read the statement, which is also uploaded to the WPmtg – indico page. According to the statement, the next steps besides political ones have to be taken by KEK to form an international development team. Keisuke remarked that the structure of this team is unclear, but KEK is working on developing a proposal. Also the LCB, which will stop working soon, is contributing to the design of the international development team. The CERN GD is positive about contributing to the ILC.

Jan Strube had written that there is a last chance of contributing to the Liaison Detector R&D report until the end of March, because there will be a final/next release in April. Several results should be updated, because they date back from the first version several years ago and we have much better results now.

Jan mentioned some doubts about a figure in the IDR, which was uploaded on archive this week (arXiv:2003.01116). On figure 5.2 the material budget of ILD is shown. According to Jan's measurement, the TPC would contribute about 6.2 % X_0, which is more than the usually quoted 5%. Also the inner part (blue band) seems to be bigger than the outer field cage (gray band). Usually it is assumed to have the inner field cage contributing 1% and the gas 1%, while the outer field cage has 3%of X_0. Frank Gaede pointed to the implementation in the software. Someone should check the numbers, which were updated by Dimitra a few years ago. A possible explanation could be, that the Internal support structure (ISS) was added to be part of the TPC.
A later verification with Frank Gaede confirmed, that the boundaries between the different bands are not exactly the sub-detectors but are of conceptual nature, thus including also other material (cables, mounting cooling) are also included, if they are relevant for the tracking detectors. The TPC alone shows the expected ~5% X_0.

PCMAG/LP setup, test beam:
Ralf: Test beam schedule:

- Uwe will have a next test beam with LYCORIS next week.

News from the groups:
Paul reported on the activities in Saclay. They have a common effort with the T2K group at Saclay to better understand the DLC resistive foil. Some sample show streaks of chemicals and scratches. The effect of these imperfections on the resistivity are being studied now. Also new analysis methods are being developed to extract the exact position from the recorded wave form instead of the pad response function. A simulation of the wave forms is in preparation.
response function. For this many different wave forms are being simulated to study the differences.

Huirong reported that the conditions in China are critical, but all will be recovered slowly. In his institute, there is a temperature detection station at the main gate of the institute, some detector tests

should be delayed according to the situation going better.

AOB:
Ron mentioned that during the ILD meeting on Tuesday there was also a presentation by Daniel Jeans on the expected beam backgrounds. There is also a draft of a note circulating, which summarizes the presentation. The simulation was done with a new version of the program reflecting all the new developments. One of the tables shows the expected backgrounds also for the TPC. The improvements which are possible by including the anti-DID are relatively small and the opinion of many in the WPmtg was that it not worth the effort (e.g. costs and complexity of the magnet).

The next workpackage meeting will take place on March 19th.