Minutes of WP-meeting 424

Attendance:

Zoom: Paul Colas, Ritsuya Hosokawa, Jochen Kaminski, Jurina Nakajima, Kohei Oikawa, Huirong Qi, Ron Settles, Nikolai Smirnov, Jan Timmermans, Kanako Watanabe

General News:

Jan, Paul and Ron commented on the third ECFA workshop on e⁺e⁻ Higgs, Electroweak and Top Factories (https://indico.in2p3.fr/event/32629/): Most interestingly, there was a fierce discussion on the ESPP. The ECFA chair was a strong supporter of the FCC and tried to frame the discussion in this direction, but there were also many supporters of the ILC (and other linear accelerators) who spoke up and defended the ILC (e.g. François Richard and Filip Zarnecki).

The early carrier researchers had a separate meeting and were discussing their opinion on FCC vs. LC. Their conclusion was, that the type didn't matter, as long as the decision would be taken soon and the project would be started in a few years, because most of the young researchers would leave the field otherwise.

There was also an interesting talk by Fabrizio Palla on the tracking, where the pixelTPC was presented as a very interesting option.

Frank Zimmermann has given a report on newest simulation about the Z-peak. It seems that with an Anti-DID solenoid the luminosity can be preserved at the Z-peak, even if the experiment is using B=3T. So the magnetic field does not have to be lowered.

Background calculations of Daniels Jeans, however, still indicate, that the ion of the Higgs events will give 1mm distortions, while the background will generate 200 times larger distortions, which will exclude a TPC from running under these conditions.

The 8th International Conference on Micro Pattern Gaseous Detectors (MPGD2024) is currently ongoing and has many interesting talks (<u>https://indico.cern.ch/event/1453371/</u>).

Huirong gave another update on the CEPC. He pointed out, that the next year will be very important for the project, as this is the last year of Wang Yifang as a director of IHEP and he is a strongest and most influential supporter of the project. So, the next 5 year plan is discussed and decided next year. He also showed the timeline for the reference TDR of the detector along with the chapterwise structure of the TDR.

Huirong also reported on the ILD meeting previous to the ECFA WS: In the presentation of Daniel Jeans various ILD model were compared and optimized for circular accelerators. Most notably, the inner diameter of the TPC was increased to 40 cm.

AOB:

The next workpackage meeting will take place on October 31st.