

SUMMARY OF THE TECHNICAL CONVENERS MEETING OF 19 June 2017

Present: Karsten, Akira, Matthew, Jean-Claude, Wataru, Marc Winter (for Auguste), Marcel, Roman, Yan, Sergej, Imad, Toshiaki, Claude.

MAY MEETING FOLLOW-UP:

- Information is being gathered about the cabling constraints of the vertex detector and its possible mitigations. This is expected to be discussed at SLAC.
- Work is still ongoing in Strasbourg to fully understand the beam-beam background simulations.
- Henri Videau provided a short document describing the details of the ECAL request change and its implications on other detectors.
- Steady work is ongoing in Lyon about the porting of the SDHCAL digitization package into DD4HEP. The Videau version is already OK and next priority is implementation for the Hybrid simulation in the TESLA geometry, followed by a geometry-independent hybrid implementation in both TESLA and Videau geometry.

INTERFACE DOCUMENTS:

Along the modifications and checks being done for the preparation of the physics benchmark detector simulation, it becomes clearer and clearer that several integration issues will have to be (re)visited at the interface between the various subdetectors. The information expected from the subdetector interface documents will be crucial for this, and subdetectors are encouraged not to delay first preliminary versions of these documents. Once they are ready it is foreseen to set up dedicated taskforces for optimisation of specific issues like signal paths, cooling and power/HV distribution.

ILD SESSION OF THE AWLC SLAC JUNE MEETING (Friday 30 June)

Several subdetector oriented talks are foreseen, whose content and configuration was further discussed:

- There will be 2 inner silicon talks: one from Marc Winter and Auguste reminding the power cabling constraints of a CMOS barrel vertex detector, as well as possible mitigation of the material effects. Marc will also briefly show the status of the beam-beam BG simulation checks. The second talk will be given by Marcel and will be more FTD oriented. One goal of the associated discussion will be to freeze the inner silicon simulation and digitization configuration for the physics benchmark samples to come soon. The talks should also trigger longer term considerations.
- A TPC talk is expected from Ties to initiate discussions on the potential of increased capabilities like pixel readout.
- The ECAL talk will be given by Jean-Claude. It will remind the details and implications of the ECAL recent changes, and elaborate on ECAL timing capabilities which could be implemented at digitization level.
- The HCAL talk will be given by Felix. Little new information versus the April Lyon meeting is expected on mechanical computations and crack studies of the Videau configuration.

NEXT VIDYO MEETING:

- Between 11th and 15th September, 10:00 Paris time, doodle to be distributed.

SUMMARY OF SHORT TERM ACTIONS (until next meeting) :

- Prepare SLAC talks
- Further investigation of beam-beam BG simulations (Alejandro).
- Completion of the implementation of the SDHCAL digitization in DD4HEP (Lyon in relation with Frank).
- Filling of subdetector interface documents (all)