Minutes of INTT meeting Mar 27, 2025

2025年3月21日　　8:59

Yuko

- Joseph's return date is changed to Apr 10.
- intt0 has no entry at all with a modified digital control parameters, but it maybe decoder issue.
- Double check with Takahiro by showing plots we got with the new digital control parameters.

Cheng-Wei

- Hit carry-over issue may not be depending open-time, but n-collision and trigger rate.
- It would be nice if you can monitor the number of hit-carry-over events vs BCO spacing
- Why the loss of hit carry-over hits could depend on the n-collisions?
    - Next trigger can come as early as 20 BCO after the previous trigger, and this next trigger event can be accept as hit_bco from 20 to 120, but rejected after the original n-collision 100. That's why should increase n-coll and open time to as large as possible.
- Maybe n-collision 127 or 128 is a flag to tell FELIX to put in the streaming mode. If it is the case, just use n-coll = 126. Need to check with Raul.
- Hit carry-over (Mixup event) issue in Run2023 could be a different mechanism since bco spacing is too big to have hit carry-over issue for trigger rate in Run2023.
- n-collisions = 127 and open_time = 127 is the best parameter to mitigate the hit carry over issue and do the test as a first priority, but also can test some other parameters to see n-collision or busy-time dependence. Cheng-Wei will send a list of the parameter settings for the commissioning test later.
- There is a buffer in Felix and it associate trigger bco to the buffered hits, Slide 10 right, 2 spikes whichis due to n-coll = 100.
- It is important to quickly quantify how many hits are actually lost due to the hit carry over issue depending on the trigger rate and n-collisions during commissioning test.

    - Joseph can provide a sample of Fun4All module to access to previous events in Fun4All framework.
- INTT group need to explain Jin our decision that we don't want to run in streaming mode in Run2025.
- Still it is not sure if the peaks of phi cluster size = 43 or 46 are fake or physics.
    - Requestion FVTX cluster size distribution to see if they have the same issue.
- According to Raul we shouldn't see the peak of phi-cluster distribution in streaming mode.
    - It would be great if Yuko can take a look at the phi cluster size in p+p streaming mode. Cheng-Wei can help her for that.
    - Very big cluster phi size is independent of the multiplicity but just a particle interaction.
    - Manami was analyzing phi-cluster size in Au+Au trigger mode.

Jaein

Posted the second draft of QM2025 poster to Indico and Invenio page, so your comments are very appreciated.