

Dear all,

Here is the minutes from today's meeting.

o Stream readout discussion <Jin & Itaru>

- **INTT onsite group** should test stream readout rate dependence before the beam.
- The official consensus of sPHENIX collaboration is 10% stream readout based on the proposed integrated luminosity. However, CAD announce the assumed performance in the past is unlikely to be achieved. Thus we should be prepared to go for 100% in case we won't achieve the proposed integrated luminosity.
- TPC front end electronics is designed to be stream readout just as FPHX. The trigger is determined by the backend just as INTT. The TPC group has not decided yet if they readout in the GL1 triggered mode or strobe readout in physics data taking. They have to optimize it with actual data taking.
- INTT group should come up with LV/HV current readouts to sPHENIX graphana panel for shift takers to monitor. The LV currents are already in a database so they are effectively available, while the we (**Joseph**+) have to develop a module to save HV currents into a database.
- We don't expect clear timing peak in BCO_FULL & BCO_FPHX in the stream readout mode. So we cannot filter trigger associated hits from random background hits as we did in the trigger mode. We have to use other detector hits to confirm that we are selecting correct trigger associated hits.
- Note the offset which may changes run-by-run basis shouldn't be needed once GL1 is working. However, it is always safer to have a redundancy, so Raul will implements a new packet with initial BCO_FULL into the data stream at the beginning of run. This way, we can calculate the offset value from offline data. This will be a good cross check of GL1.

o z-cluster size study <Tomoya>

- **Tomoya** should compare z-cluster size histogram with/without (hot channel & BCO) cuts to see if Mikel's z-cluster size distribution can be reproduced.
- **Tomoya** should come up with a clear definition of z-cluster. Does the z-cluster requires exact same strip to be fired in adjacent chips?
- **Tomoya** should check the actual hit distribution of the large z-cluster with the event display.
- **Tomoya** should check more events and make event displays to see if large z-cluster always behaves like event displays presented in Tomoya's slides.

o InttBCOFinder & InttHitMap Module Review <Jaein>

- **Jaein** talks to Chris his preference in how to implement under calibration sub directories new codes.

- This review is approved.

o QA plan <Genki>

- Option "C" DST is the main stream, but option "B" is available in case option-"C" has problems. Option "B" is a temporary fallback solution especially during commissioning period when we have a trouble if option-"C" is not running due to any problems propagated from other subsystems.

- QA plots have been implemented and they appear on the web page.

- **Genki** talks to Jason&Chris if option "B" can be included in his production rather than cronjob Genki's separate script.

- Eventually, the hit-base TTree should be generated through the official DST rather than branched out from the main stream.

- Cron hits should be monitored online as well.

- **Genki** will announce the QA web page to software group to let them aware the INTT QA system is well established.

Best regards,

-itaru

On 2024/04/23 10:04, Itaru Nakagawa wrote:

Dear all,

We'll have the weekly meeting in following time. At the beginning of the meeting, a guest speaker Jin will give the short introduction of the stream readout to educate us what we gain from it. We would also continue to discuss about the readiness for Run24 in this meeting.

Apr. 24th Wednesday 9AM in BNL = Apr. 24th Wednesday 10PM in Japan = Wednesday 9PM in Taiwan

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*indico

<https://indico.bnl.gov/event/23076/>

*Zoom

<https://zoom.us/j/92149923535>

Best regards,

-itaru

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