

Subject: Re: [[Sphenix-intt-l]] INTT Weekly Meeting <Minutes>
From: Itaru Nakagawa <itaru@riken.jp>
Date: 2024/07/17 12:35
To: sphenix-intt-l@lists.bnl.gov

Dear all,

Here are the minutes from today's meeting.

o Cluster numbers <Genki>

- **Genki** checks diffractive physics process in PYTHIA.
- Genki's current estimate of the INTT efficiency w.r.t. MB events (not MB trigger) is 85% within the PYTHIA MC.
- **Genki's** next step is to implement the MB trigger in his study which requires to simulate the signal size in order to compare with the experimental INTT efficiency with respect to the MB trigger.
- **Joe** is planning to assign a man power to documenting the MC after the Run.

o Cosmic tracks <Wei-Che>

- **Wei-Che** should take the strip length in the fitting. It will relieve the unreasonable fit in r-z plane.
- **Wei-Che** should present the residual distribution of the r-phi plane to show the quality of the fit.
- **Wei-Che** converts the horizontal axis to the angle and should cover the 90 degrees in the plot.

o hot/cold map update <Joseph>

- **Joseph** keeps cold channels, and only kill hot ones.
- **Joseph** push the current code now.

o Stream readout test and expert shift <Akitomo>

- There is no way to tell of possible phase change in the GTM under the stream readout mode. In order to avoid keep taking data without noticing it, we should take some trigger mode run for a short period in regular basis.
- **Akitomo** will check the documentation for the DM shift instructions and make relevant update if necessary.

o Check online monitor issue <Tomoya>

- BCO decoding data dropping -> fill symptom.
- No clear evidence is observed in the correlation between the fill symptom and live trigger rate so far.
- **Tomoya/Yui** will look into older data for more high trigger rate runs.
- **Tomoya/Yui** should check the data size of fill symptom runs if the issue is only in the online and can be recovered in offline decoding. The data size suppose to be small for the fill symptom runs if the data are really dropped in recording.
- **Joseph** is working on the health check of fill symptom data in the offline decoding to address above question if the data is collapsed or not even the data size look normal.

o Online QA plot instructions <Tomoya>

- **Tomoya** posts the instruction on the relevant page of the INTT wiki.

o HV online monitor <Ryota>

- **Ryota** should contact with Joseph about the mapping and plot only channels proving HV power to silicons, not to show any empty channels.
- We don't have the HV cable channel mapping for Run24. We have to investigate after the Run25 is over.
- **Ryota** should change the good voltage threshold to be $95 < V < 101$, instead of $80 < V < 101$.

o Stream readout GL1 matching efficiency <Takashi>

- **Takashi** should limit MBD trigger +/- 10 cm and photon and Jet triggers
- Takashi tries to estimate the random coincidence effect into the GL1 matching efficiency
- The collaboration decision is let **Takashi** looks into more stream readout test data and see how stable the GL1 matching efficiency is and evaluate possible accidental effects. Due to the current discouraged situation to change any conditions, we rather spend time to study more by Takashi rather than rushing to switch to the stream readout.

Best regards,

-itaru

On 2024/07/16 23:20, Itaru Nakagawa wrote:

Dear all,

We will have next INTT weekly meeting in following date/time.

July 17th Wednesday 9AM in BNL = July 17th Wednesday 10PM in Japan = Wednesday 9PM in Taiwan

--

*indico

<https://indico.bnl.gov/event/24260/>

*Zoom

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

Best regards,

-itaru