

Dear all,

Here are the minutes from today's meeting. **Thank you for Cheng-Wei and Mahiro for very quick feedback reports on z-vertex reconstruction from the Au+Au runs took last week.**

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o Stream readout GL1 matching update <Jaein>

- Addressed on the difference between Jaein's, Genki's, and Takashi's same analyses in the GL1 matching INTT hit event efficiency. Many conditions can be different between three analyses like crossing angle, trigger mix, hot/dead channels, etc.

- Jaein reproduced Jaein's result using Genki's analysis code by analyzing same data as Jaein's analysis.

- Takashi's original GL1 matching results can be qualitatively explained from the difference in the trigger mix and the z-vertex distribution (fraction of events out side of  $z_{vtx} < 10\text{cm}$ ).

- The INTT's GL1 matching efficiency with MBDNS( $< 10\text{cm}$ ) in p+p is now understood to be around 96% or so and consistent with Phythia prediction.

o First glance on Run24 Au+Au zero field run <Cheng-Wei>

- Nice quick analysis work in Au+Au Run24 data. z-vertex reconstruction after standard QA filters + phi cluster size  $< 6$  and cluster ADC  $> 35$  appeared to be centered around  $z = -4\text{cm}$  while MBD online monitor predicted around  $z = 0\text{cm}$ . The raw cluster-z distribution also biased towards negative z-side.

- **Cheng-Wei** uploaded the slides to indico and **Akitomo** will report in the SCM today.

- **Cheng-Wei** asks Chris to run the event combiner between MBD and INTT DSTs. **Itaru & Akitomo** prompt Chris to process the event combiner.

o Onsite report <Akitomo>

- TPC is working reasonably.

- MVTX is working on establishing clean beam condition closely working with MCR crews.

- **Itaru** consults with Raul to get calibration feature back in the firmware to run calibrations in 1008.

- **Students** are welcome to volunteer to work on the analysis of special runs we've took so far. Some of data can be analyzed in standalone without Fun4All framework.

o Cosmic ray alignment <Wei-Che>

- Updated cosmic ray analysis based on number of clusters = 4 only. Both phi and z distributions of clusters/track make sense and reasonable.
- **Wei-Che** works on number of clusters > 4 as the next step.

o INTT workshop plan update <Jaein>

- Yasuyuki suggested to start with sPHENIX and then INTT afterword for Itaru's lecture. The basics of the silicon detector is to be included in the INTT detector talk. The entire talk suppose to be 90 minutes and the main target of the audience is to be shot for undergrad and freshman year of graduate students.

o Z-vertex reconstruction of Au+Au <Mahiro>

- Mahiro presented z-vertex reconstruction from the Au+Au run on October 8th. The MBD showed the z-vertex distribution centered around z=0, but Mahiro's reconstructed z-vertex position to be at z=-5cm. The run is different from Cheng-Wei's zero-field data, but the trend is consistent with Cheng-Wei's analysis.
- **Akitomo** will present Mahiro's results in the SCM as well on behalf of Mahiro with more information of beam conditions.

Best regards,

-itaru

On 2024/10/16 5:22, Itaru Nakagawa wrote:

Dear all,

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

**Oct. 16th Wednesday 9AM in BNL = Oct. 16th Wednesday 10PM in Japan = Wednesday 9PM in Taiwan**

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\*indico

<https://indico.bnl.gov/event/25156/>

\*Zoom

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

Best regards,

-itaru