Hi all,

Here is the minutes from today's meeting.

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o DAC Scan <Yuka>

- Modify the fitting range < 130 from present 170 to improve the chi-2/ndf to get closer to 1. The current chi-2/ndf ~ 39 would underestimate the fitting error of MPV.

o Beam Test Efficiency Analysis <Cheng-Wei>

- **Cheng-Wei** should apply correction for data efficiency by divided by MC efficiency. It should increase data efficiency from 93% to 95% or so.

- Random hits contribution should be subtracted from the numerator. Random hit rate can be quoted from previous study.

- **Cheng-Wei** will run MC without single Coulomb scattering and confirm the residual distribution.

- Tune the material thickness of the MC by 10% or so to see if MC reproduces the tail of residual distribution. This way, any inefficiency caused by the residual window cut can be completely compensated. (Shouldn't be counted as inefficiency).

o Radiation Dose Estimate of TLK chips <Itaru>

- The pixel sample in J. Asai's paper was located 10cm instead of 2cm in radius from the beam center. Itaru updated the calculation based on 10cm in the slide and re-posted to indico page.

- According to recalculation, the exposed radiation dose during 5 years of PHENIX operation was 300/pb, which is 2/3 of drastic increase of leakage current starts.

- Thanks to longer distance of ROC position of INTT compared to that of FVTX's, the expected radiation dose for TLKs during INTT operation is only 5% of FVTX's.

- Although we observed a few % of total TLK chips show suspicious behavior, we may not see substantially more failures during INTT operation due to moderate radiation exposure duriing INTT operation.

- As a risk management, we only replace slow control TLK chips with new TLK chips before Run23. 50 new TLK chips were already purchased.

Regards,

-itaru

On 2022/12/07 9:48, Itaru Nakagawa wrote:

> Dear all,
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> We'll have the weekly meeting in following time.
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> Dec. 8th Thursday 8PM in BNL = Dec. 9th Friday 10AM in Japan = Friday 9AM in Taiwan
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> *indico
>
> https://indico.bnl.gov/event/17919/
>
> *Zoom
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> https://zoom.us/j/92149923535
>
> Best regards,
>
> -itaru