

Hi all,

Here is the minutes from today's meeting.

[https://www.nishina.riken.jp/researcher/APR/call\\_e.html](https://www.nishina.riken.jp/researcher/APR/call_e.html)

The deadline is January 31st.

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Call for contribution to the RIKEN Nishina Center Annual Report.

o DAC Scan Analysis <Yuka>

– Cheng-Wei apply the same cuts to MC energy distribution and provides the MC spectrum of MC to Yuka so that she can superimpose it to experimental one allowing comparison between data and MC. The horizontal axis needs to be shifted to match with experimental data peak position.

– Yuka is to evaluate the effect of Landau function which includes the integral of  $x$  by fitting the DAC spectrum individually function by function. It is expected to be minor effect because, first of all, the fitting results seem to be reasonable, contamination of exponential tail back ground into the signal region and left side of Landau distribution to the background region are both small. It is OK just to confirm the individual fit won't be too different with the simultaneous fit.

o Self Introduction <Jaein>

– Jaein Hwang (Korea University) is a new member of INTT team. He is finishing his Masters in coming February. Planning to write Ph.D thesis out of sPHENIX run using INTT.

– Jaein built drift chambers for RAON experiment as a Masters work. Ran garfield simulation as well.

o BNL Activities Update <Itaru>

– Itaru and John K. proved channels of fake hits observed using a high speed oscilloscope during a calibration data taking. However, no AC components were observed. The baseline of the positive and negative input lines were quite consistent and didn't observe any indication which can possibly exceeds minimum of 100mV to be judged as "TRUE" in the receiver. The baselines were both rock solid and thus we didn't observe any direct evidence of the origin of fake hits.

– A new hypothesis of the origin of fake hits came up, which is the misbehavior of radiation damaged TLK transeivers. If this is the cause, then it has nothing to do with open ports and even worse it can appear in the ladder port as well. There is no guarantee that we can distinguish them from the true signal. Further investigation is to be carried out in test bench.

o Partial data drop of D3 Port Issue.

– Partial data drop of D3 port symptom was also observed in BNL using the barrel. It is now concluded that the symptom is not caused by the environment since the barrel ladders and ROCs are the best condition in terms of environment we have achieved so far. Kazuma will look into the circuit design of the ROC board if there is anything unique to the D3 port of the ROC.

Best regards,

–itaru

On 2022/12/14 21:00, Itaru Nakagawa (Riken-intt-list 経由) wrote:

Dear all,

We'll have the weekly meeting in following time.

Dec. 15th Thursday 8PM in BNL = Dec. 16th Friday 10AM in Japan = Friday 9AM in Taiwan

\*indico

<https://indico.bnl.gov/event/17967/>

\*Zoom

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

Best regards,

–itaru