

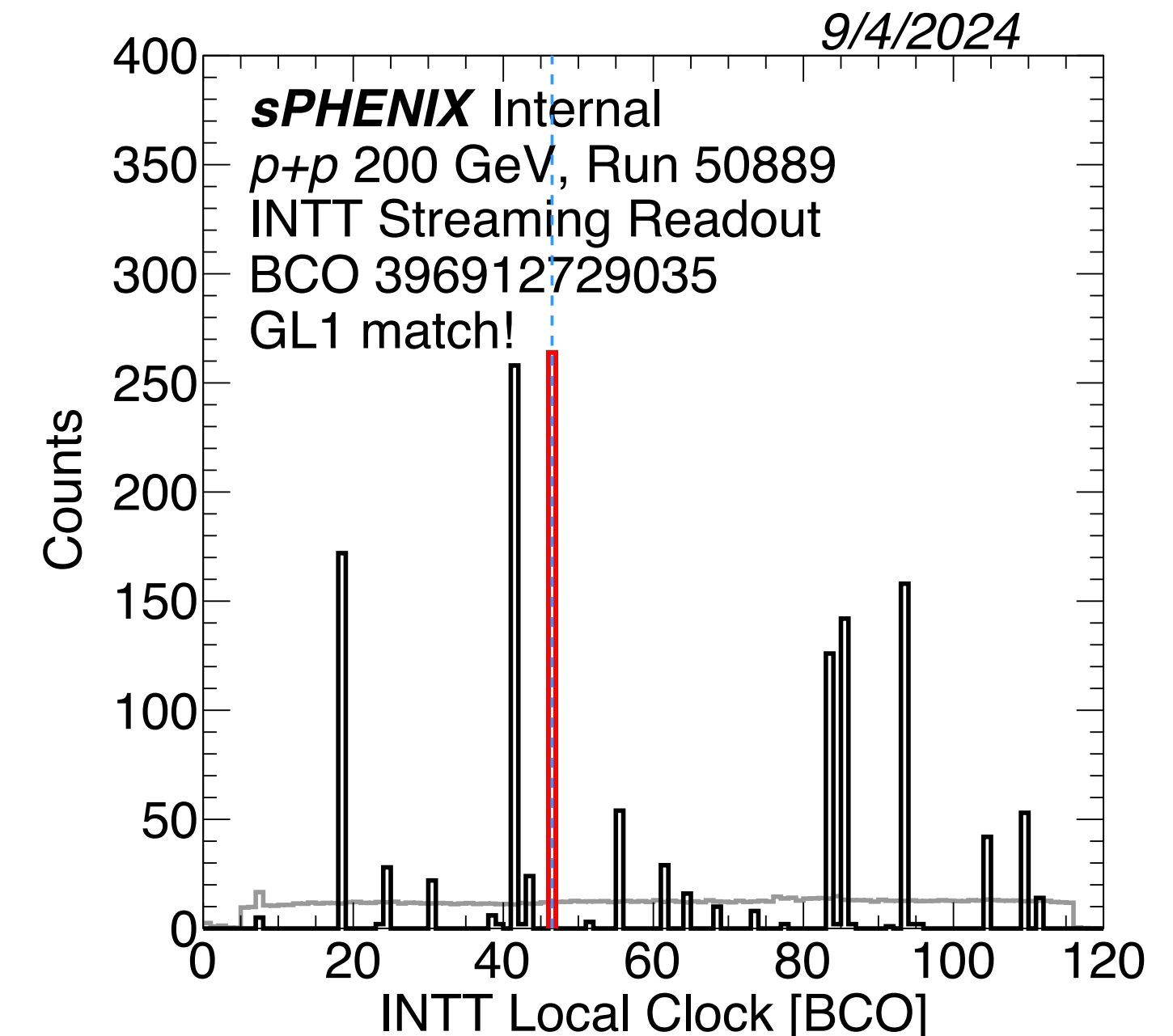
INTT Preliminary in Sep 2024

Timing plot for triggered data

Genki Nukazuka (RIKEN)

Plots related to the timing performance using triggered data

- My talk at JPS is about INTT but in the session for nucleon structure/high energy QCD (not a detector session). Not only the performance but also the role of INTT in spin physics are expected.
- We already made a plot related to the timing performance using streaming readout data.
- We should have a performance plot of timing with triggered data. It's probably a width of a peak in the BCO difference plot as a function of I1 delay.
- I couldn't take time for this analysis so dropped from this preliminary campaign (same excuse used before). But I have to show something in the JPS meeting 🤔



BCO difference plot

What about showing the BCO difference plot?

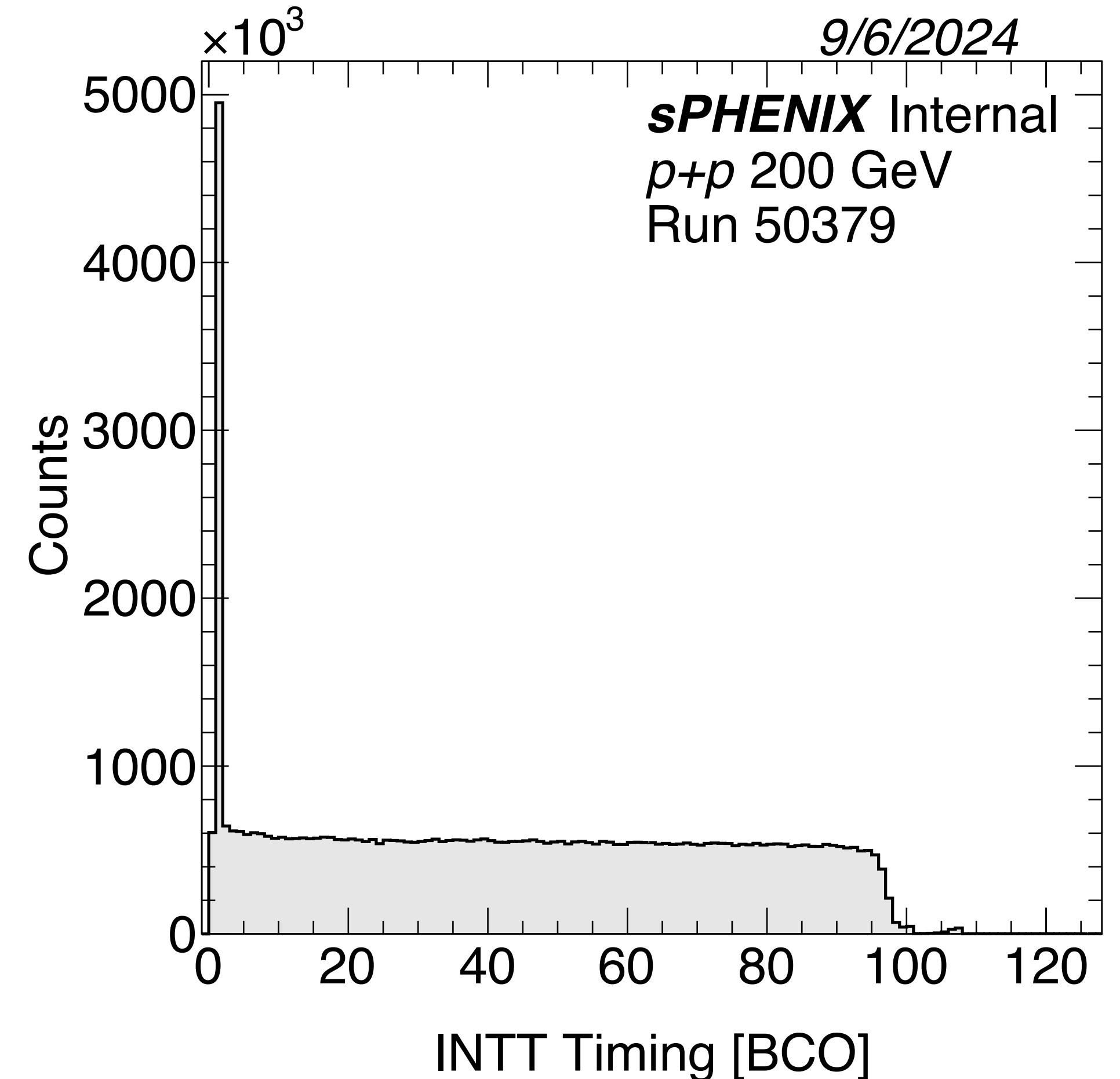
Definition of the BCO difference

FPHX BCO - lower 7 bits of GTM BCO

To avoid confusion of audience, it's good to shift the distribution to put the rising edge of the beginning of readout at 0.

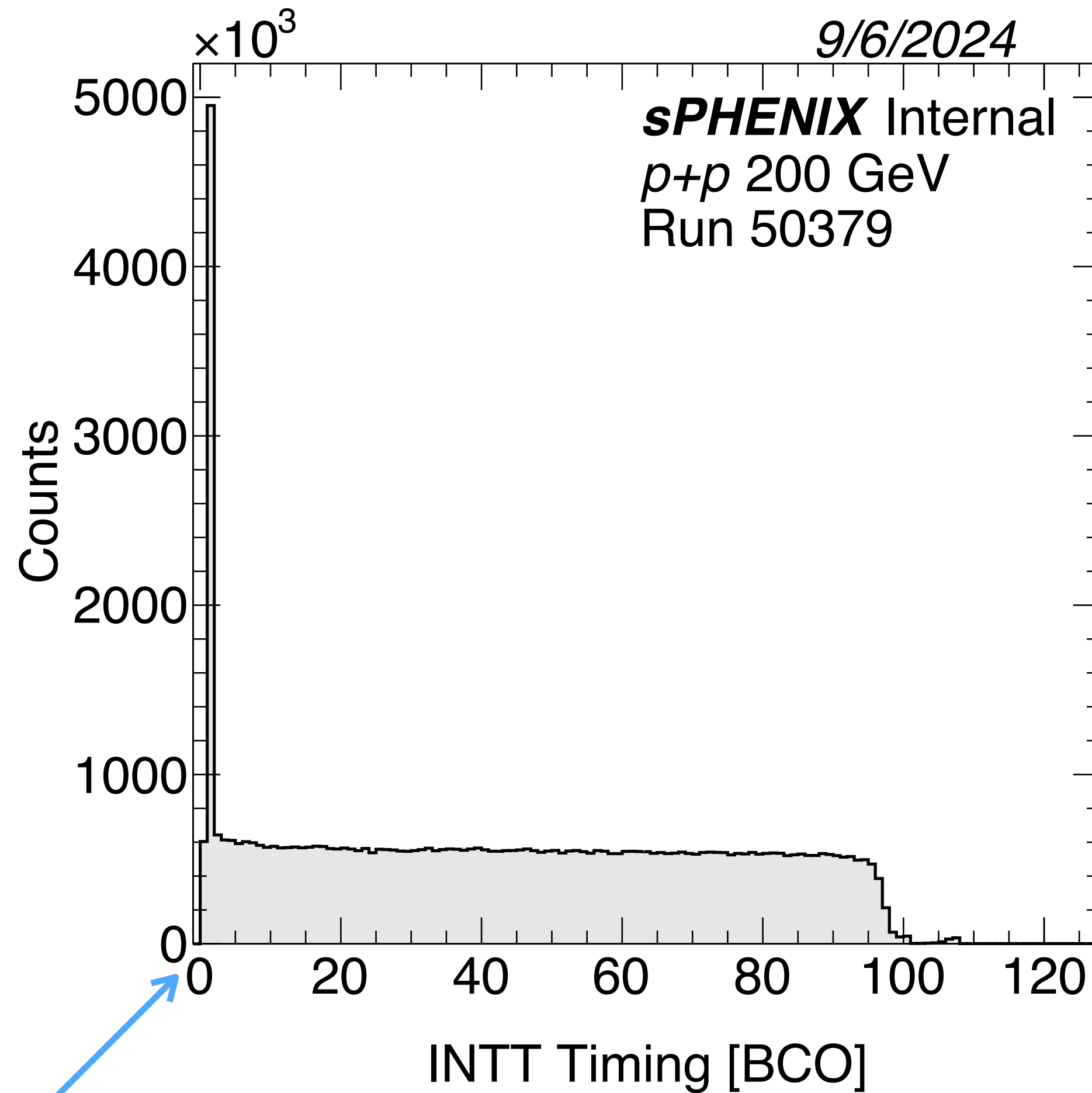
Analysis condition:

- Run 50889
- l1delay: 114
- Hot channel rejection was applied.
- TrkrHit was used. Hits with ADC 35 were removed.



BCO difference plot

Y-axis should be in liner scale.



Making this plot using TrkrCluster is also possible by taking hits with a particular FPHX BCO. It's necessary not to clusterize hits from a different collision. I haven't checked whether it makes the plots better or not.

X-axis is started from -1 to show the rising edge clearly.

What is a good name for the title?