Baseline Vs High Rate Runs (Pulse Generator)

From last time:

- Small effect

Tkr triggered events with additional pulse trigger are more likely to be inconsistent
Let's study the Tkr Condition Arrival Time of the events:

Remember from Anders' presentation last week:

- **Between 0-4:** The trigger line becomes active during trigger window (or actually opens trigger window)
- **31:** The corresponding bit in the trigger word is not set

OR

The trigger line was already high when the trigger window was opened, it gets into the trigger word though..

These events are “good” tkr-triggered events

The fraction of events that have more trigger requests than hits is the same for baseline and high rate runs!
Summary

- The discrepancy shown in slide 1 is due to events triggered by the pulse generator at the same time the tkr line was high (leftover from the past)
- Latching takes place long time after the tkr line went up, no wonder some of the hits are missing
- Considering only “meant to be” tkr triggers, baseline and high rate runs are consistent.
- Wont it be more convenient to think of a Tkr Trigger as something with GemCondArrivalTimeTkr<5 ???

Still working on the other half of the puzzle....

Events with Tkr Trigger (inclusive)

Events with Tkr Trigger (exclusive)

Why does it get worse for top layers?

How can the pulse affect events that have pure tkr trigger?