

Tests and Plans — Discussion

- How much time do we need with beam to get PXD ready and do our tests?
- With beam & all Belle2 on?
- Too few time in spring (“all detectors must be in”)
- Calibration clashes with global data taking (e.g. taking pedestals because of need for FTSW trigger)
 - How to proceed here?

- ROI selection
 - We want ROI selection ON for high rate DAQ test (todo)
 - → will test for all DHE automatically
 - With beam (1 run / >>1h)
 - Do we want to run with ROI selection?
 - Not really necessary from data rate point of view
 - Risk of loosing hits (e.g. Tracking issues in FWD region)
 - Low pT (large dEdx) hits w/o ROIs are lost

- (Automatic) recovery from de-sync
- Do we need some extra time (with dirty injections, no veto) to verify this?
 - Test with PXD standalone and poisson trigger?

- Real test and adjustment need beam
 - Online if possible, offline analysis only if necessary
 - Tuning of parameters need time, depends how strong the effect is
 - Beam with injections (top up), single beam preferred because injections for LER and HER overlap!
 - Stable beam conditions to see any effect of parameter change
 - “dirty” injections
 - small (no?) trigger veto → impact on Belle data taking!
 - If we can live with default veto, we could run parasitically during normal data taking (with PXD marked as ‘bad’)
- Time: several shifts as we might need to tune things in between
 - If beam conditions change, we might have to re-tune

- Load balancing – most likely no test needed
- Wish list: rework HV and recovery
 - Recovery from “Trip”
 - Automatic full power up from OFF (by CR shifter)
 - Remark: any change on the HV system has heavy impact on accelerator operation (blocking injection etc)