General (Stefan/Kin)

- Commissioning is continuing with all detectors, so:
- All work (subsystem or infrastructure) needs to be discussed in the shift change meeting in advance
- Shift Leader needs to be informed of all work (single point of contact)
- No items can be removed from IR that were exposed to beam without scan by health physicist (arranged through shift leader)
- Need good run list
- Small Snake was removed :-)



- Kin: monthly "automatic transfer switch test" for 1008A/B will happen tomorrow at 10 am.
- Run table including MBD : link

Current Priority Items (PC)

- Take two weeks to look for tracks from cosmics in TPC, MVTX, INTT, TPOT (until end of August) before considering opening up the detector
- Get TPC to work (again)
- MVTX firmware/software development for fast reset of read-out
- DAQ development to get to high speed
- Exercise all detectors and read-out by taking cosmics data

• Identify work plan for subsystem maintenance so that we only open/close detector once Work Control Coordinators (Chris/Joel)

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Plan of the Day (Stefan/PC/all-to be revisited at end of meeting)

- Continue search for TPC signal pulse
- Continue cosmics with HCal coincidence trigger

Evening (Virginia)

- Took cosmics with tracking detectors + HCal + ZDC/sEPD
- INTT tested streaming in local mode and in global big partition
  - INTT with streaming reduced trigger live rate from ~30Hz to ~10Hz; raw rate stayed constant

Night (Christine A./Silas)

- INTT chiller lad2 tripped, recovered by Rob, kept INTT out of run until flow rate returned to >5 LPM
- Aside from that, cosmics running went fine

Day (Christine N -> Craig)

- Took cosmics most of shift
- INTT chiller alarm. Rob came in and worked on chiller and no alarms since,
- Question for MVTX expert: Double check can we run the clock error recovery button during a run?
  - [MPeters] you can, but would be preferable to stop the run first to maximize the amount of good runtime (clock error during run permanently affects data rate from one FELIX server until run is ended and restarted)
- Some subsystems spontaneously stop taking data and need to be restarted.
- Detector operator station computer crashed. (Control Room 1). Had to reboot and restore all GUIs
- RCDAQ hung up once and had to be restarted
- Tried to end Run 25589 using RCDAQ GUI and run did not end normally. Martin had to intervene.

Magnet (Kin)

 Magnet temperature drifts up. Some vacuum problem might have made the temperature rise a bit faster than usual; but now the Cryo group has closed some valves (outside sPHENIX Magnet Valvebox) to improve the vacuum and so since then, the temperatures seem to have stayed flat (~40K or so).

MBD ()

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Trigger (Dan)

GTM/GL1 (Martin/Dan/John K)

• Version 49 still needs to be installed

DAQ (Martin/John H)

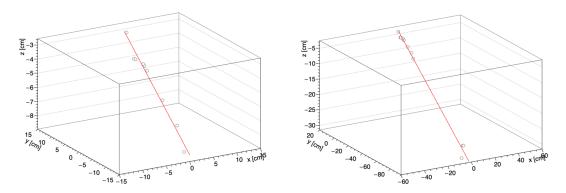
• Took seb00 and seb01 back for DAQ development

MVTX (Hao-Ren)

• MVTX+INTT+TPOT event display (huge thanks to Hugo and Cheng-Wei!)

INTT BCO = <b>883639102957</b> MVTX L1Trg/TPOT BCO = <b>883639</b> 1	102958	+Z <b>←</b>
SPHENIX Internal Cosmic run 2023-06-11, Run 25475 MVTX+INTT-FTPOT		
INTT BCO = 883639102957 MVTX L1Trg/TPOT BCO = 8836391	102958	+Z <b>←</b>
	102958	+2 <
MVTX L1Trg/TPOT BCO = 8836391		+2 <

 Also tested a simple straight line fit to MVTX+INTT clusters (left) and MVTX+INTT+TPOT (right)

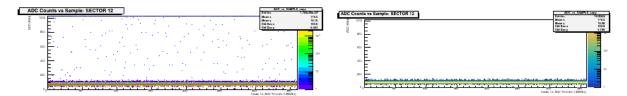


TPC (Tom Hemmick, Jin, Takao, Evgeny, Charles, David, Bob, Ross, John K., Nick, Christal)

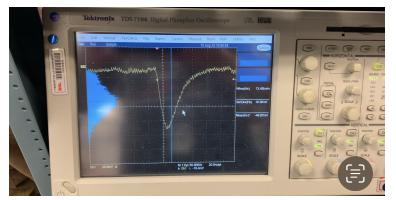
- Yesterday 08/14 after SCM:
  - Worked with David to transfer operational knowledge of spark protection system
  - David leaves Thursday important to spread out knowledge
  - Did some routine FEE card maintenance
    - Power cycled some stuck FEEs
    - SAMPA Programming
    - FELIX re-link
    - Fixed some funky channels in Sector 12 R2:

BEFORE

AFTER



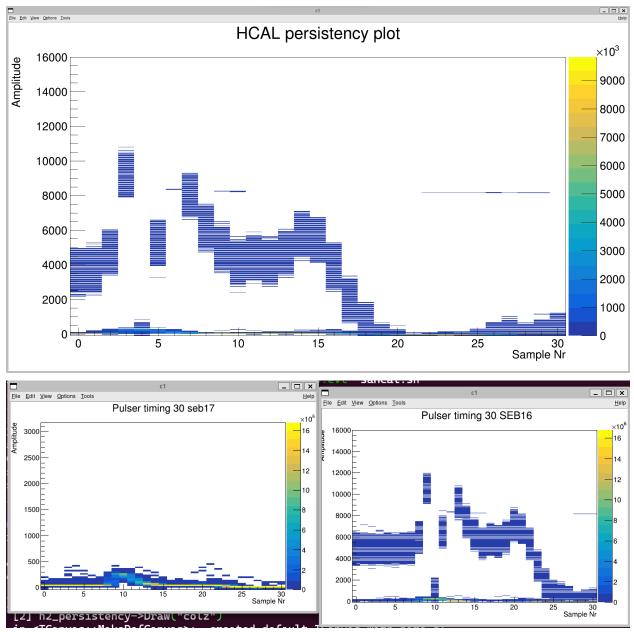
- Today 08/15:
  - Another "discussion" day amongst TPC
  - Met with Frank, Jim, Rob, Bob, Tom, Chris Ponteiri, Joel, Lee about canary chamber this morning been discussing ever since
    - Made a concrete plan for temporary installation
    - Going on 2nd floor East near TPC return manifold
    - In terms of time to do, nominally 1 week. Chris Pontieri is communicating with C-AD
  - Went to Bob Azmoun's lab in physics to see the canary chamber. It sees 10 Hz signals from the Fe-55 source at 4680 V.



- Nick Gilligan working on measuring gain as f(V,P/T)
- Gives us a gain curve reference with a working chamber before it goes in IR
- $\circ$   $\,$  Did a walkthrough of gas system with Tom, Bob, and Rob Pisani
  - Went from manifolds in IR, to gas house, to gas pad
  - VERY productive. Tom had been asking for this for some time

HCal (Silas)

- No LED signal seen
- Test pulse timing is off on west, non-existent on east, will step through channel by channel to try to validate that this behavior is fully anomalous, I'll work on this tonight



• Need to look at data from the recent cosmics runs, validate that the data looks good EMCal (Sean)

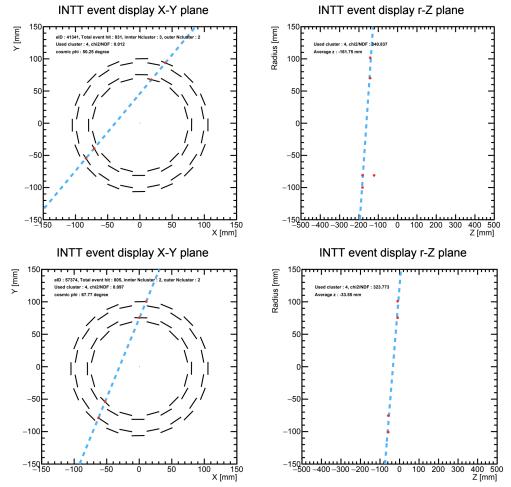
• Nothing to report

TPOT (Hugo)

- Nothing to report
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INTT (Cheng-Wei/Genki)

• The test of the streaming readout mode were performed yesterday, and we could find some cosmic tracks. The tests were done in the local mode mainly. We also took a run (#25578) in the global mode together with MVTX.



- We were back to the BigPartition global mode and operating the detector in the trigger mode. We keep this condition for 1-2 days to have some statistics without magnetic field. sEPD(Rosi)
- North side electronics install tomorrow! Gas/Cooling ()

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ZDC ()
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Background Counters ()

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Online Monitoring (Chris)

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