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MĀNOA

KLM Update for KLM Trig/DAQ Workshop at Budker Institute

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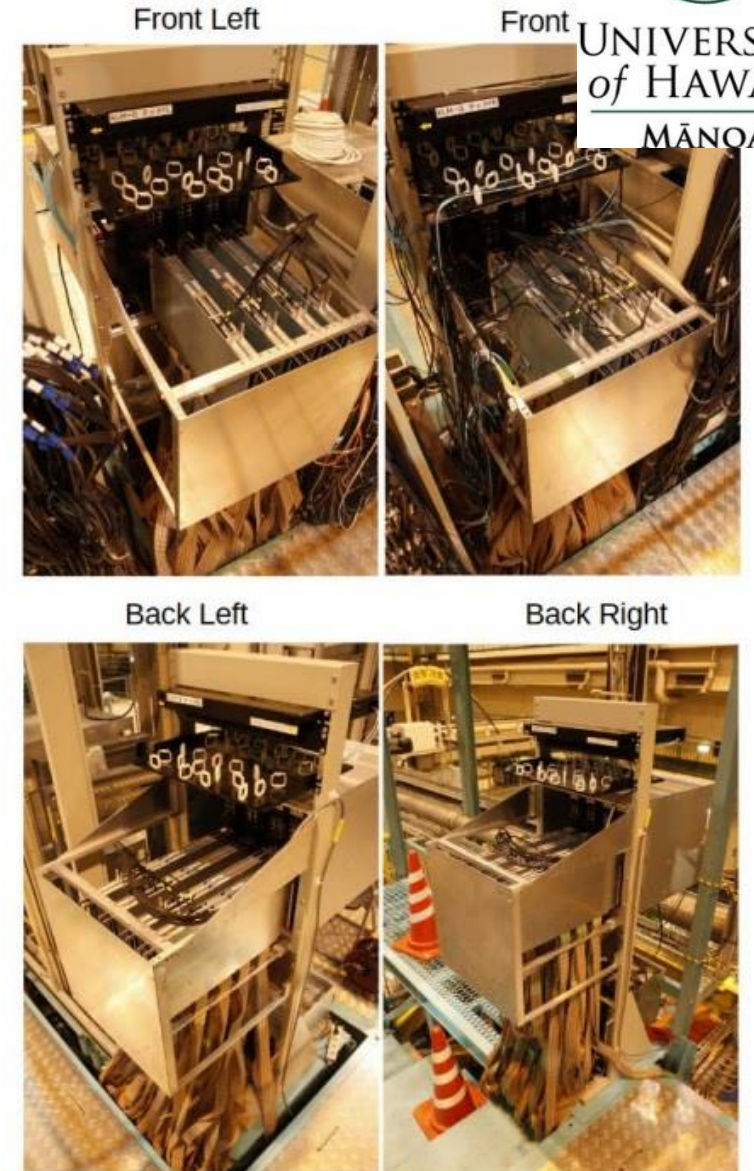
Sep 6, 2016, 11am NOVT

For KLM



Updates and current status

- All barrel scintillator readout modules are installed and tested (UH)
- Scintillator HV cables installed (KEK)
- Trigger, readout and FTSW Fiber trunks have been installed from e-Hut to crates (KEK)
- 33 Dataconcentrators arrived at KEK (IU)
- Tech transfer to INFN to build RPC readout modules (IU)
- Readout FW updated (IU, UH)
- UT3 can now read RPC and scint. trig packets
- 17x KLM scint. spare modules are under test at UH
- Most Endcap scint. Modules were installed (ITEP-KEK)



Barrel scint. readout modules-Chris Ketter, UH

KLM: Recent updates

- Recovered from annual shutdown
- Inter-crate fiber and TTD cables were installed (KEK)- awaiting tests
- FTSW FW was updated to allow cascading scheme (KEK)- awaiting tests
- Data taking and debug to get cosmic tracks (UH-IU-KEK)
 - Gain and threshold calibration has been done
 - Tweaked look back windows to be able to see tracks in data
- Debugged FW level automatic gain and calibrations for scint. (UH)- awaiting test

Next steps I: Isar @ KEK: Sep 12-19

- Dataconcentrators will be installed once FTSWs and cables are in place (KEK)
- Generate UT3 triggers from all installed barrel scint. modules (KEK-UH)
- Perform all barrel scint. readout (UH-KEK-IU)
- Take CRT data:
 - All barrel scint modules
 - Find tracks
 - Integrate w trigger (UH-KEK-VP)
- Joint Scint./TOP trigger and readout (All)?



Next steps II: Isar @ KEK: Sep 12-19

- Test new Scint. FW:
 - Updating TTD and B2L interface modules in progress
 - Updated pedestal calculation FW:
 - Provides better avg. and RMS checking
 - Updated upstream trigger packet handling
 - Enhanced FW based SiPM calibration

Tracks from CRT 6/22/16

- Fixed RPC look back window
- CRT tracks seen in RPC and Scint. Layers
 - Debugging some anomalies
- Trigger data for instrumented sectors now flowing to UT3
 - Debugging rates and anomalies

