

# Short summary of recent cosmic runs with CRT trigger

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## Week of Nov 18 - Nov 24

- Cosmic runs with general CRT trigger
  - Setting up the configurations and system
  - Debugging few minor issues at the beginning of the week and smooth data taking at the rest of the week
  - All detector components active and working nicely

## Week of Nov 25 - Dec 1

- Attenuation, PDS and CE calibration runs
  - Runs with triggering on one of the up and downstream CRT "pixels" (4 different configurations)
  - PDS calibration and bias scan runs for 2 days
  - CE calibration runs with external pulser (20 different configurations)
  - Smooth operation and data taking during the week

# Week of Dec 2 - Dec 6

- Cosmic runs with CRT trigger + HV scans
- Few issues have affected data taking and the quality of the data we took this week
  - APA-4 alignment issues since Tuesday
  - cob3\_rce03 issue with 7.5ms rate
  
- Cosmic runs with general CRT trigger
  - New configuration with 1 tick delay bases on the analysis of Richie
  - Collected data on Monday with all detector components.
  - Data from Tuesday and Wednesday does not include APA-4
- HV scan runs
  - 7.5 ms readout window and different electric fields (500V/cm, 400V/cm, ...)
    - Started yesterday with 500V/cm and today we took data at 400V/cm
    - Currently running at 300V/cm
    - No APA-4 and cob3\_rce03 in the run configurations

# Runlist and notes..

- Cosmic runs with CRT trigger:
  - <https://docs.google.com/spreadsheets/d/1CXmx5378kdNpW9ziBvR6zpb5XyrlNdbt0UySh6rvcV4/edit#gid=0>
- CE calibration runs:
  - <https://docs.google.com/spreadsheets/d/1CXmx5378kdNpW9ziBvR6zpb5XyrlNdbt0UySh6rvcV4/edit#gid=2023561964>
- Updating also “AFTER Beam Run” list regularly

# Conclusions and outlook

- Good progress during the first two weeks of data taking (>50h of data with CRT and sometimes 1Hz random trigger)
- Few persisting issues during the last week
- We'll need 1-2 days to finalize HV scan runs next week

**Thanks to all Shifters, DAQ and  
detector experts!!**