TEXAS TECH UNIVERSITY™

CMS: Silicon Strip Tracker

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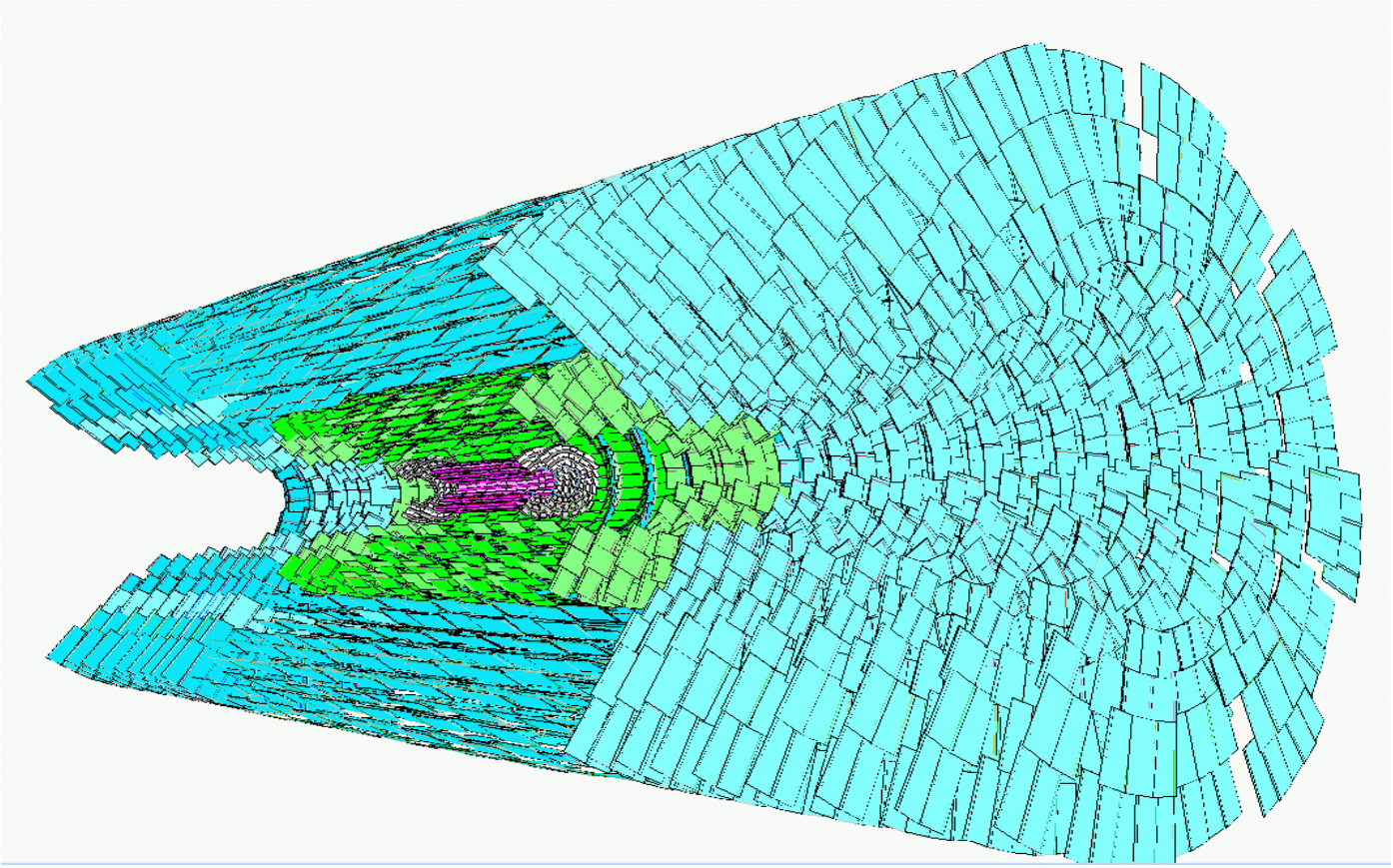
UM-CERN REU

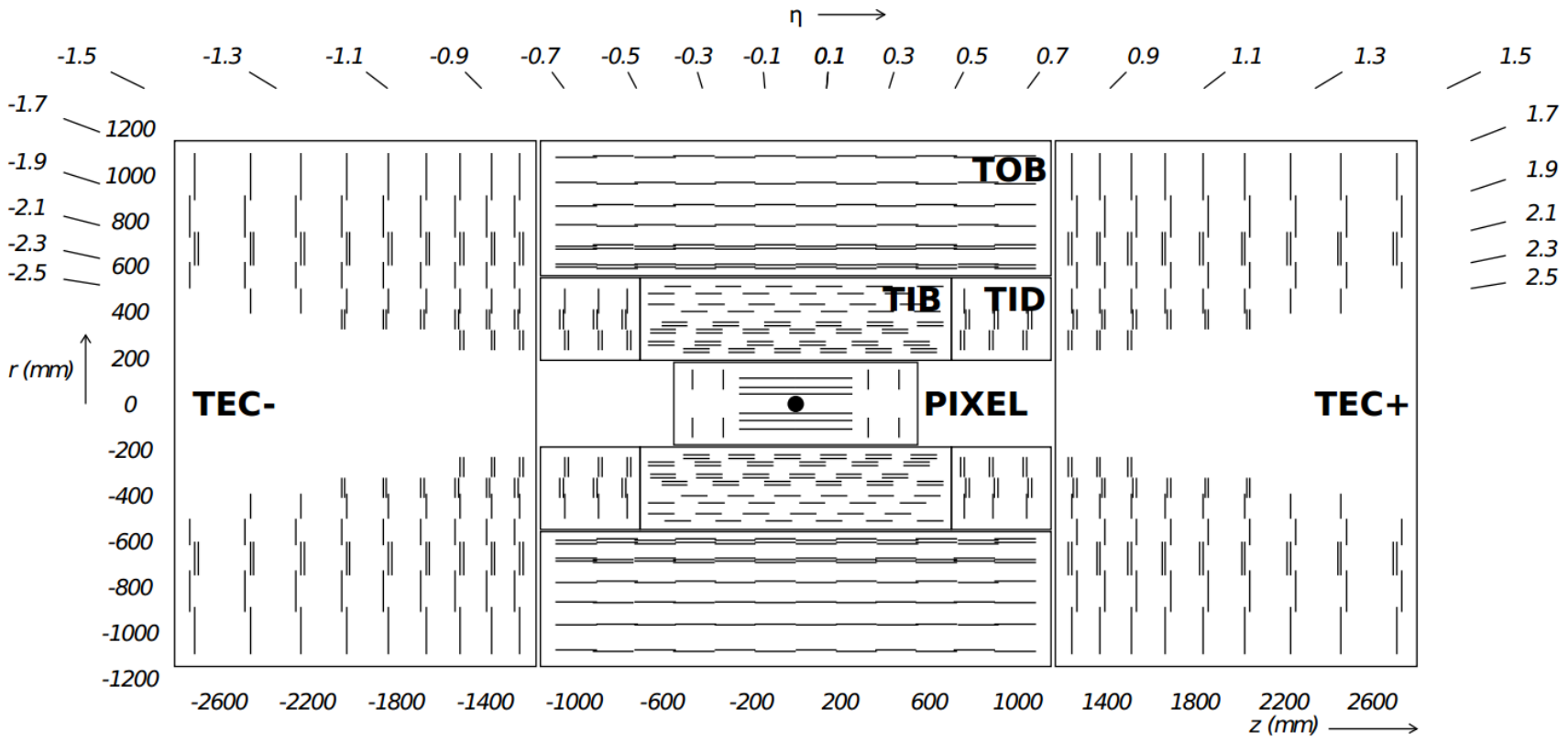
Experiment

- CMS-SiStrip Tracker

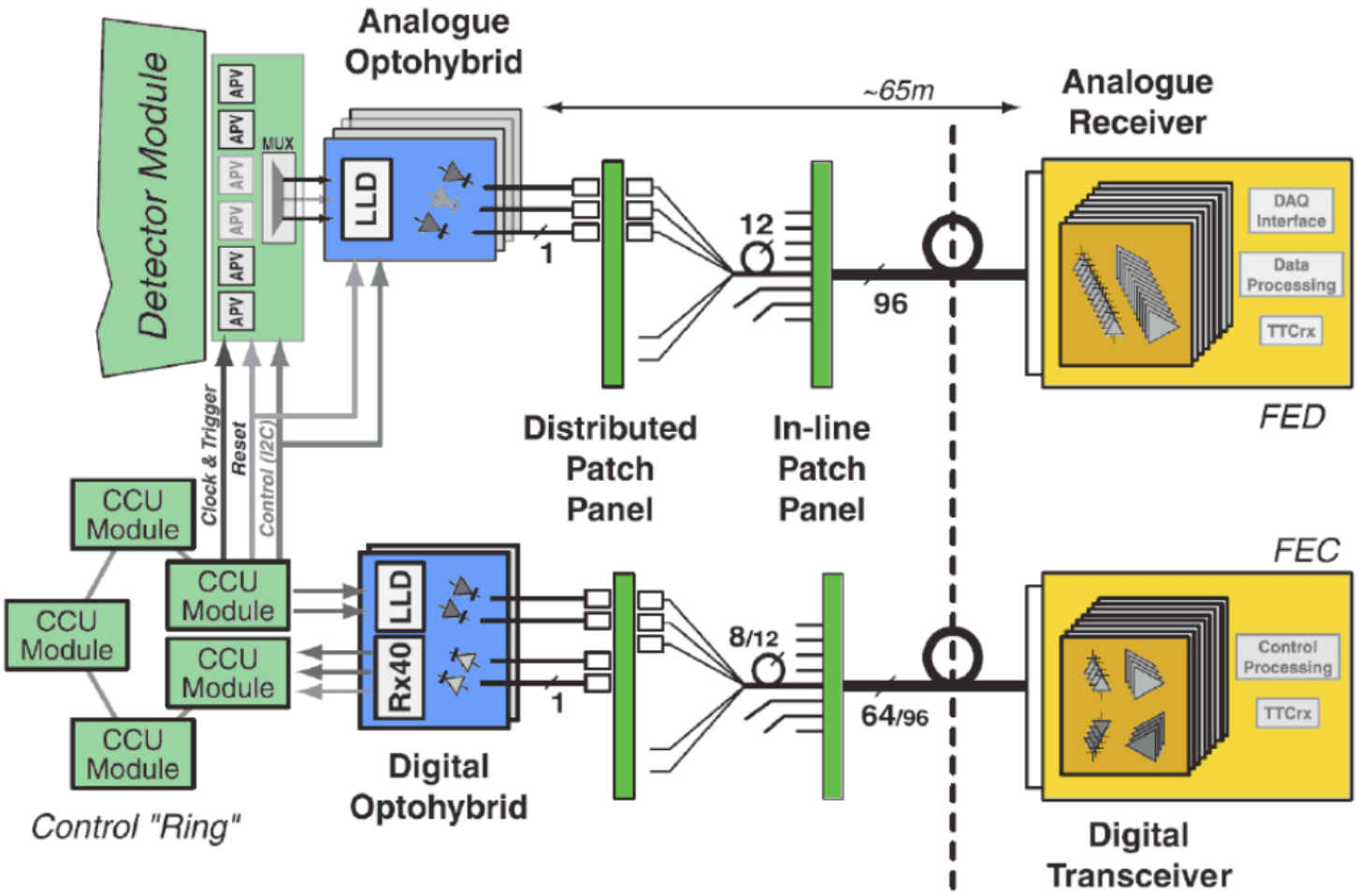


Experiment

- Strip Tracker Sub-Detectors



Electronic Setup

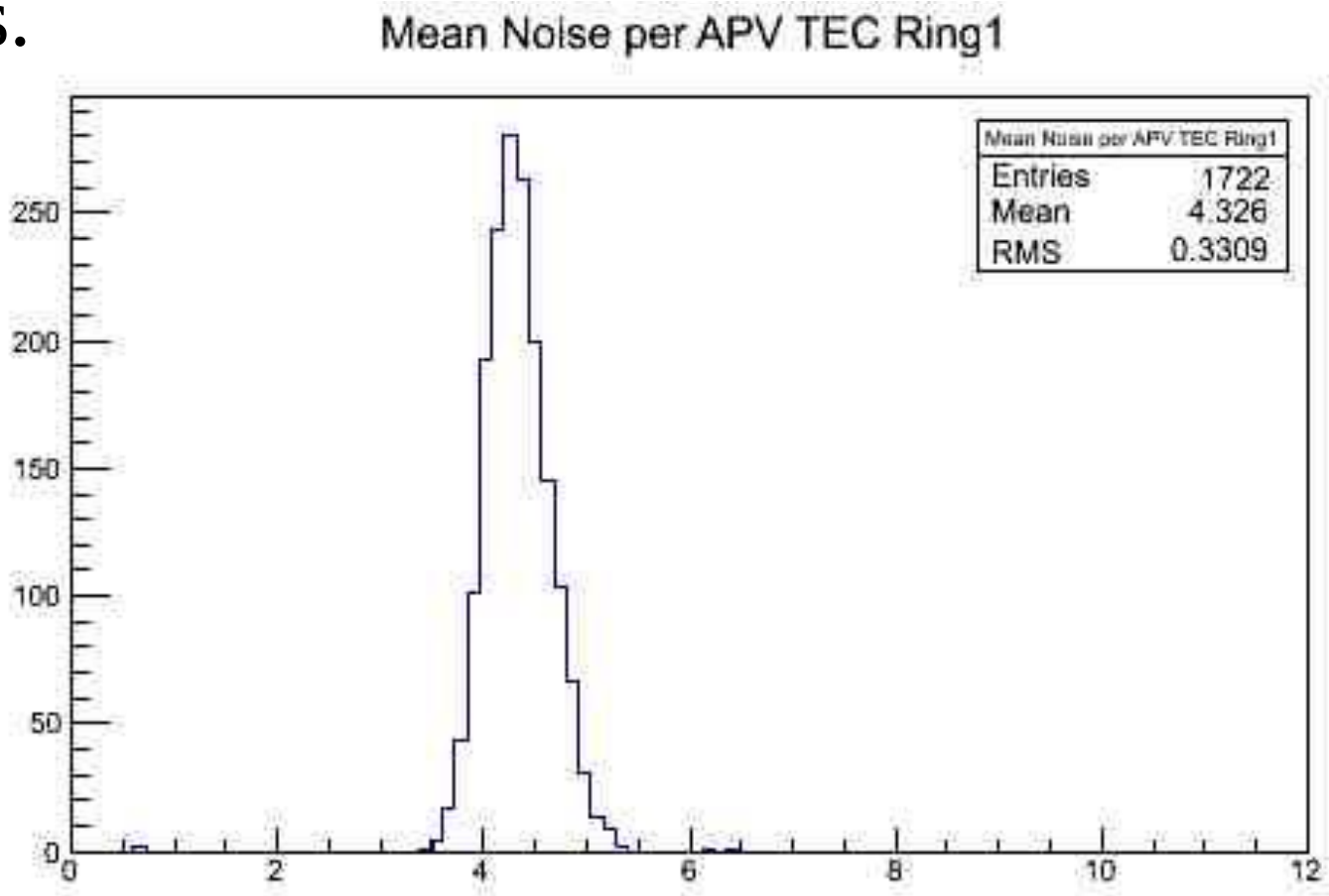


My Project

- For now, write a program to process the recorded noise values for individual APVs.
- Sort these APVs into subsets of the subdetectors (TEC,TOB,…)
- Compare the noise values of individual APVs to the average of the subset in which they are located.
- Make a list of the “outlier” APVs and compare to the lists of other runs.

Current Progress

- Completed the sorting of APVs into their subsets.



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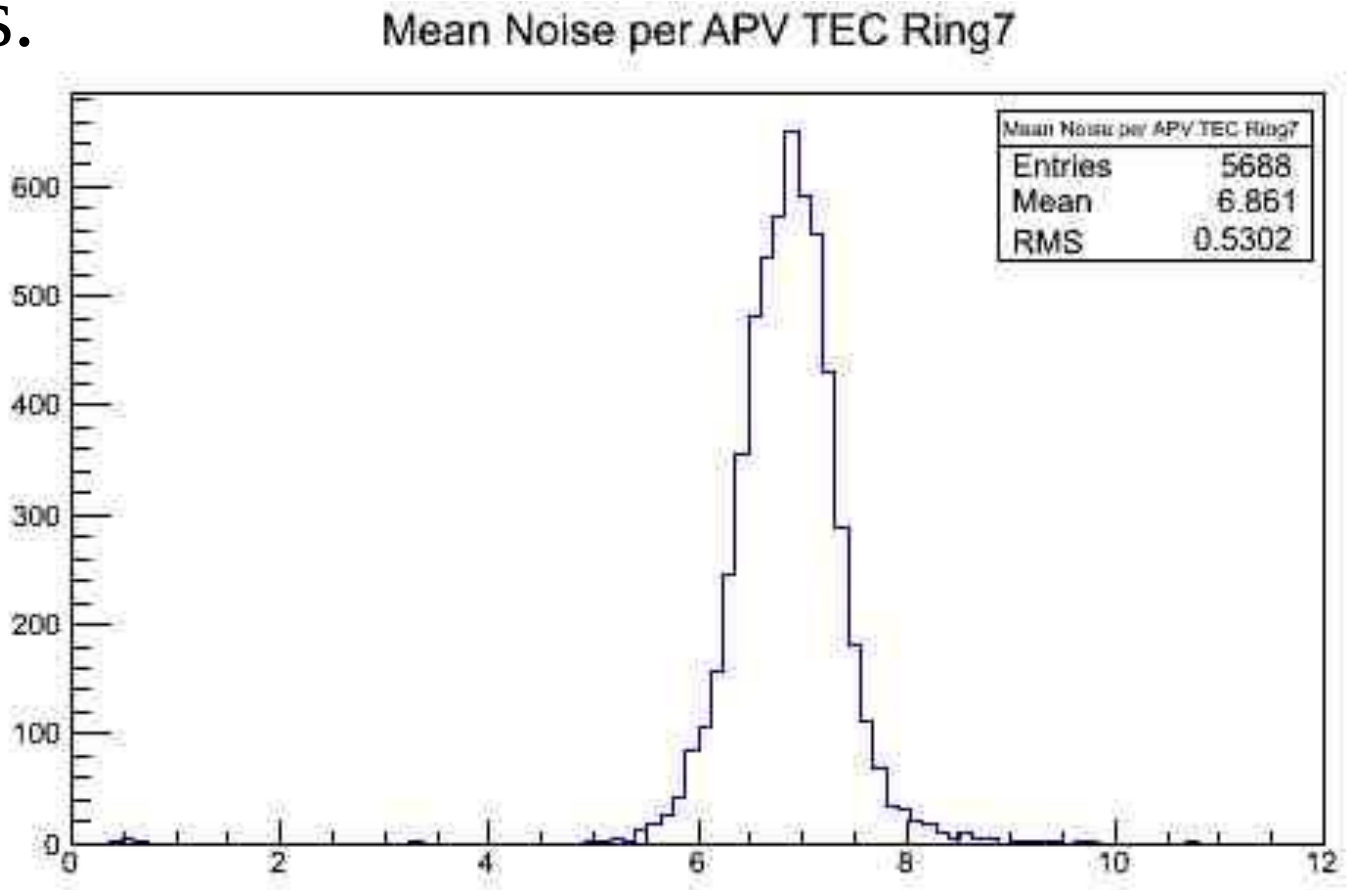

Future Plans

- Working on a function to compare the bad APVs between two runs and list the correlations.
- Examine what could be causing these malfunctions (bad modules, bad APVs, etc.)
- Eventually, perform the same analysis on a strip by strip basis (128 strips per APV)