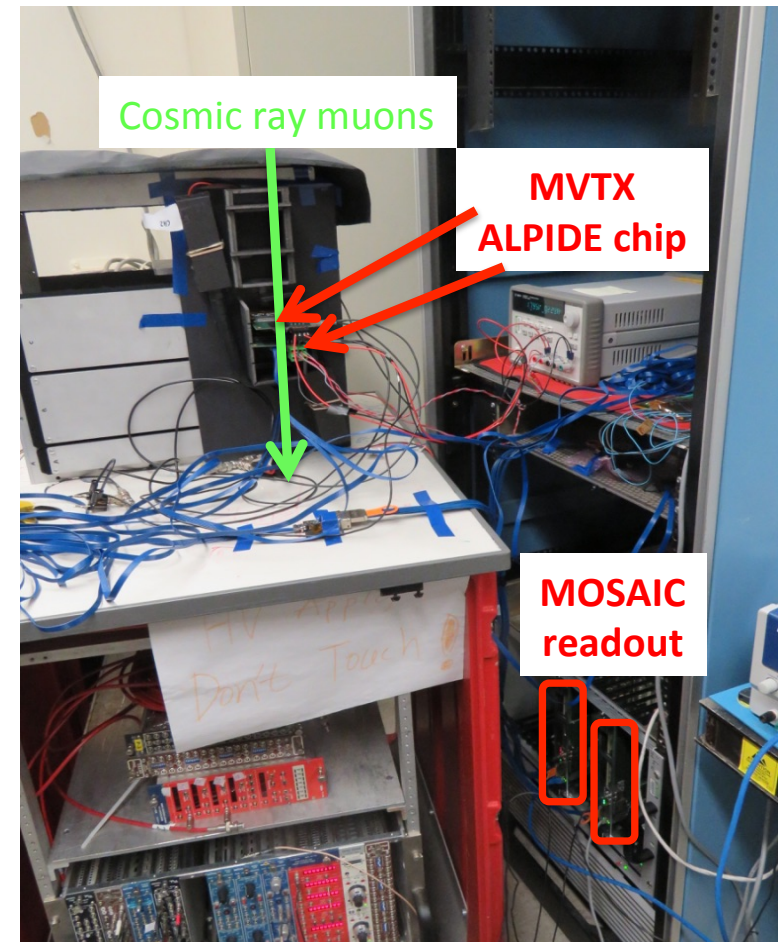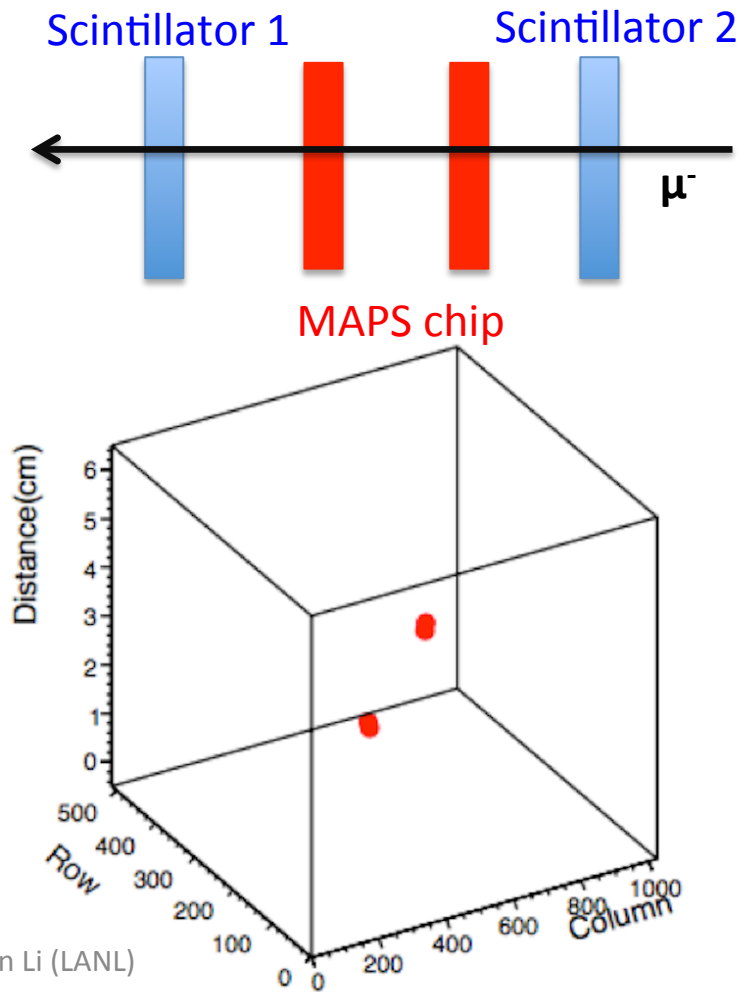# MVTX mosaic single chip/stave test status and plans

Xuan Li (LANL)

Status (I)

- Set up two layers of ALPIDE chips and run cosmic ray test with the coincidence trigger. Use the MOSAIC readout.
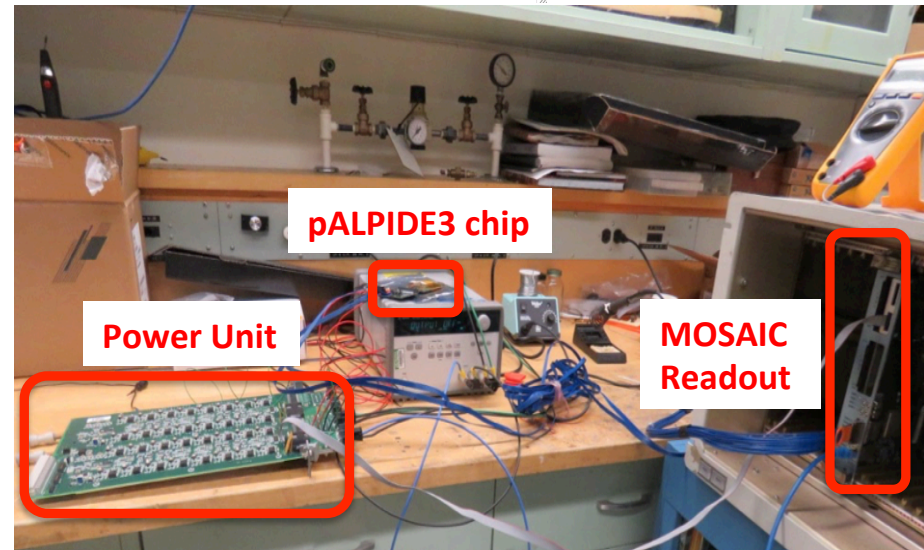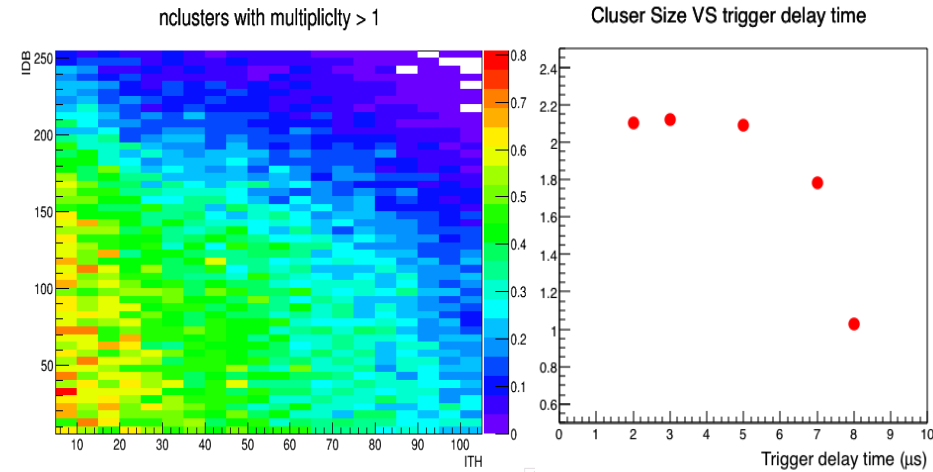
  - Clear track hits found. Done

Status (II)

- Continue the source and cosmic ray test with different readout configurations:
  - trigger delay time: done
  - Threshold scan: done
  - Bias voltage: start soon
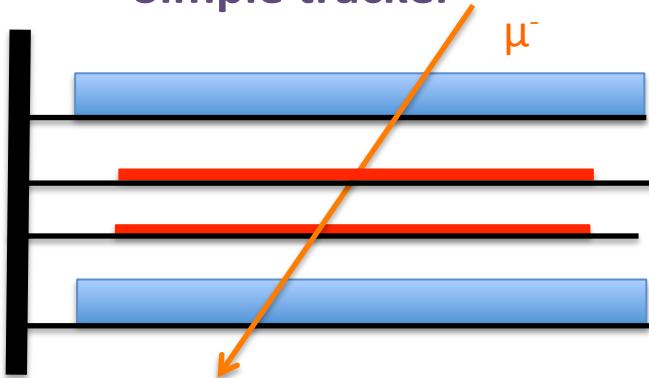 - Readout speed: start soon
- The Power Unit:
  - Setup and communication with the MOSAIC board: done
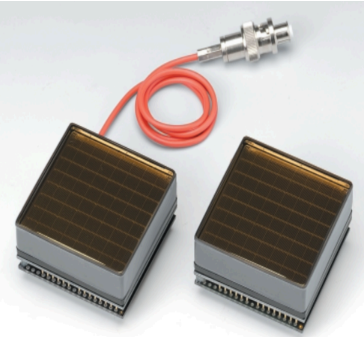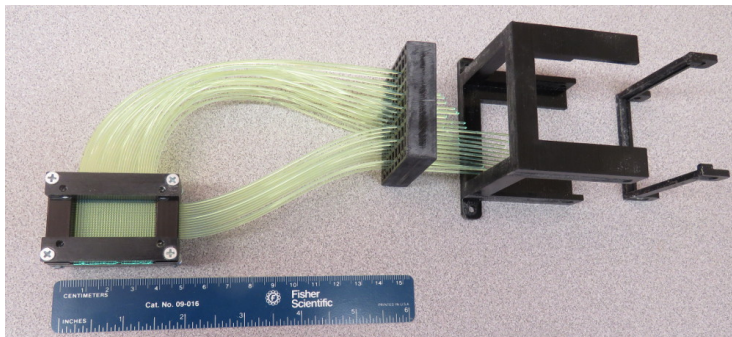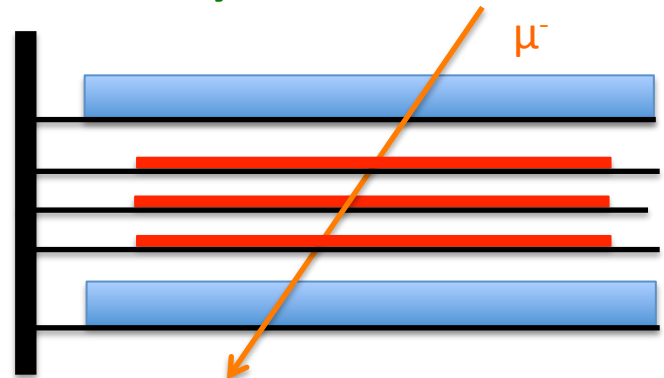 - Communication with the full readout chain: start later

Plan

- Continue the source and cosmic ray test with different readout configurations:

- Develop the analysis package for multiple chip/stave cosmic ray test to study the efficiency, resolution etc.

Simple tracker

μ^-

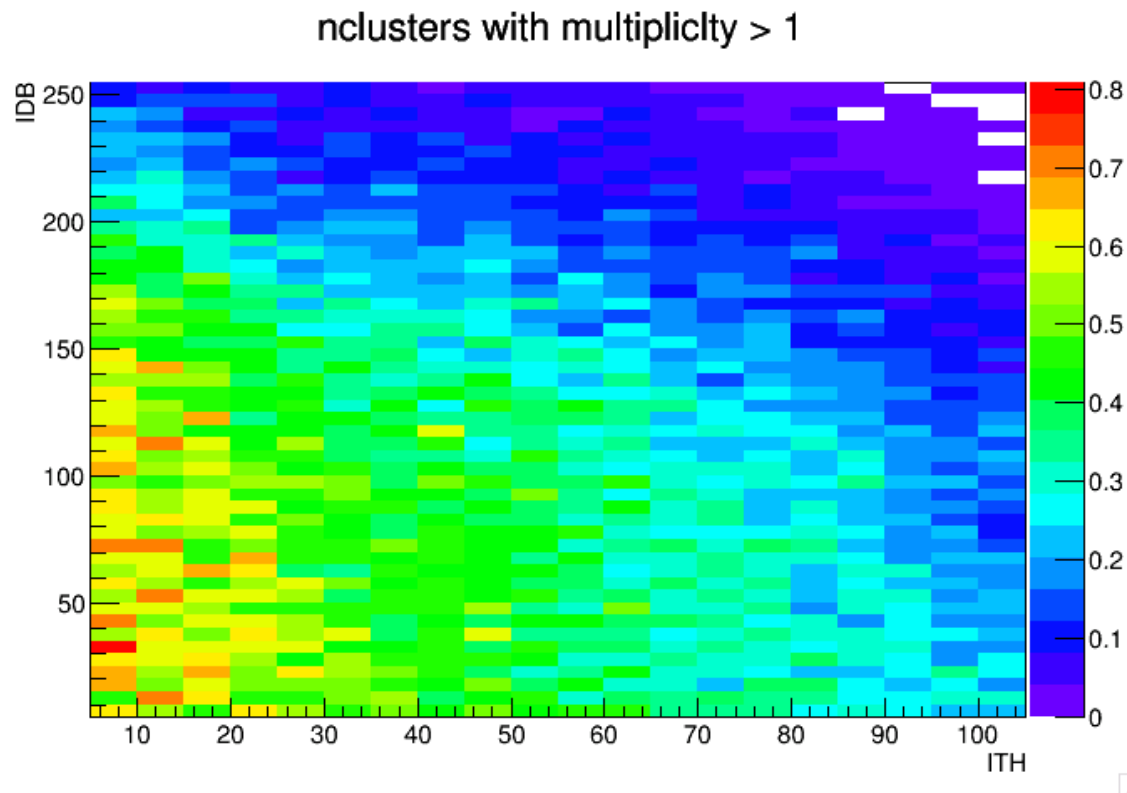**Efficiency and resolution tester**

μ^-

- Use the precise trigger system to determine the efficiency and align the chips.

Backup

Scan of IDB and ITHR parameters

Plot shows the rate (Hz) of multi-pixel clusters as a function of IDB and ITHR

nclusters with multipliclty > 1

From Elena

External trigger generated by coincidence of PMT1 and PMT2
Rate in range 0.5 – 1 Hz