Issues of RICH APV based on the RUN2016 experiences
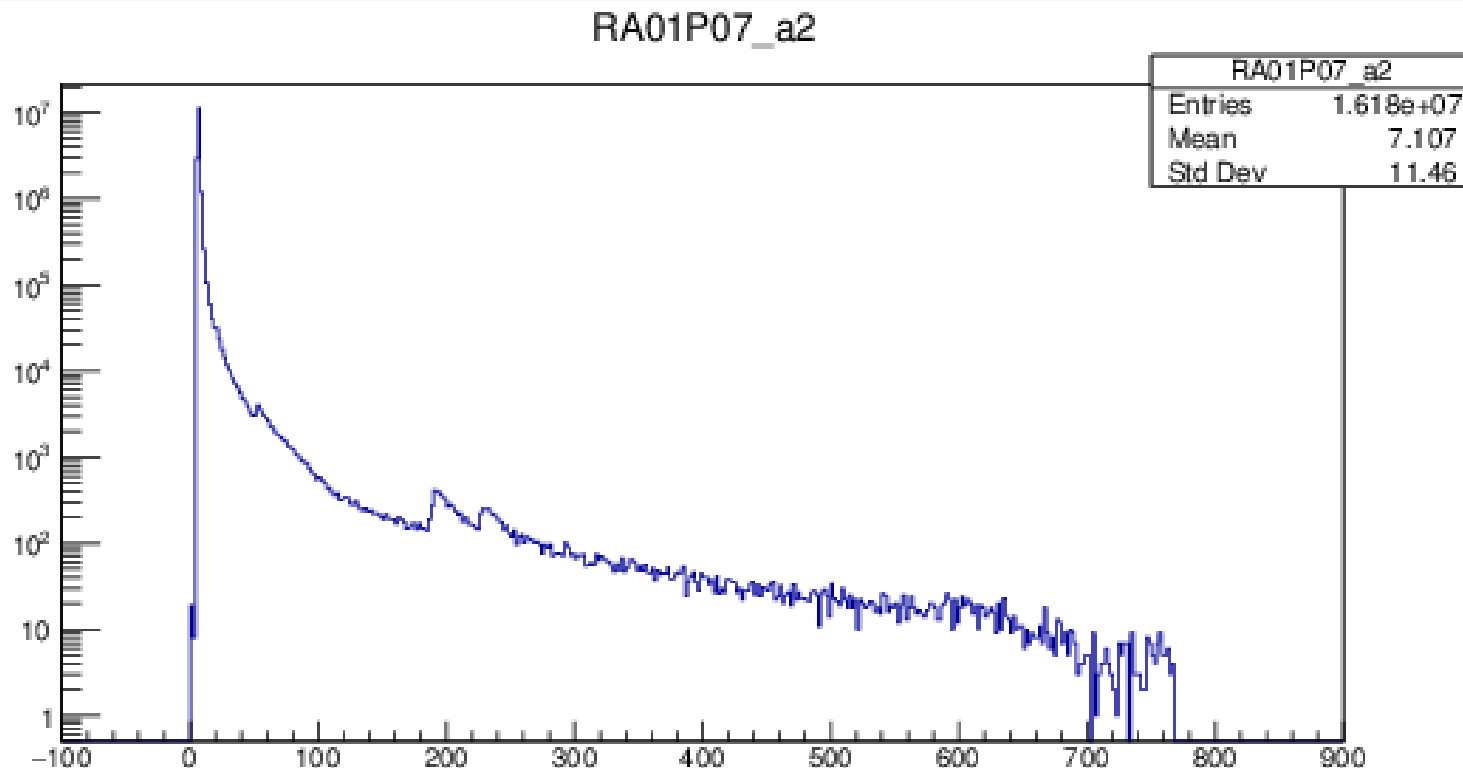
- Seconday spikes in A2 spectra

- APV Header Error

- Below-threshold A2 singals (reported now)

Gergő Hamar

INFN Trieste

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Issue 1 : Spikes

- Seconday spikes in A2 spectra
    Seen on MWPCs as well, on a few fix channels
    → Seems to be connected with wrong pedestals..

Issues 2 : APV Header Err.

- APV Header Error

    Can occure when Hybrid sparks (~10% of sparks)
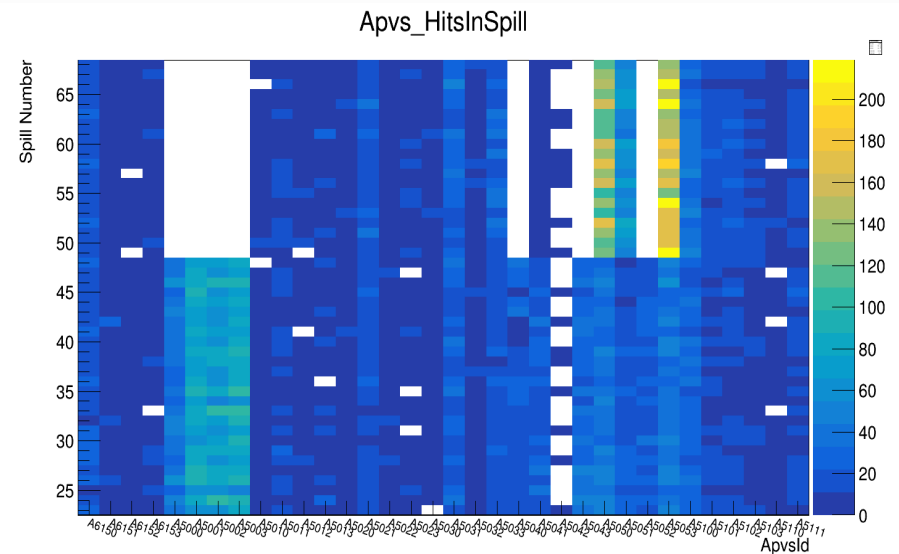
    Mp: modifies header, Hit gets replaced/killed

    Load: `LOAD -A` $\rightarrow$ `LOAD -ra` : seems to work

    RICH:

        Reduce sparking,

        Enforce grounding

    FE:

        Automatic reload?

        PopUp window
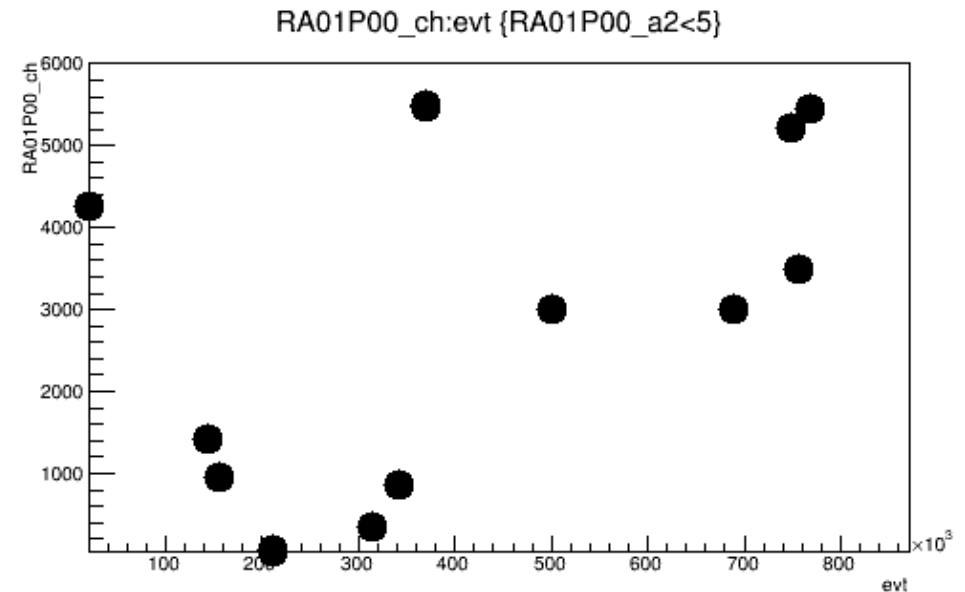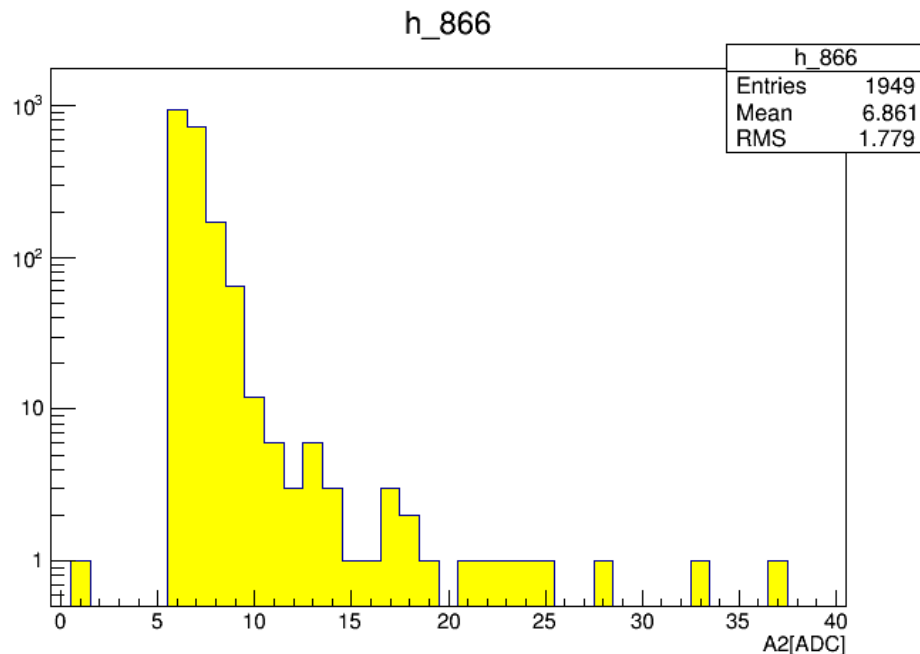

Apvs_HitsInSpill

Shall it be done during Run in Off-Spill?

    `LOAD -F -ra`

Issue 3 - Below-Threshold Hit

- Below-threshold A2 singal (reported now)
  - Measured few hits below threshold: *strange*
  - Scattered in channels / events, on MWPCs
  - Absolutely not serious for Data Quality / DataFlow
  - May it be an indicator of some underlying serious issue?

Chandra's plots

Issues of RICH APV based on the RUN2016 experiences

- Seconday spikes in A2 spectra
  Seen on MWPCs as well, on a few fix channels
  → Seems to be connected with wrong pedestals..

- APV Header Error
  Can occure when Hybrid sparks (~10% of sparks)
  Mp: modifies header, Hit gets replaced/killed
  Load: LOAD -ra : seems to work
  RICH: reduce sparking, enforce grounding
  FE: PopUp window to notify for reload (?)

- Below-threshold A2 singal (reported now)
  Measured few hits below threshold: strange
  Scattered in channels / events, on MWPCs
  Absolutely not serious for Data flow + quality