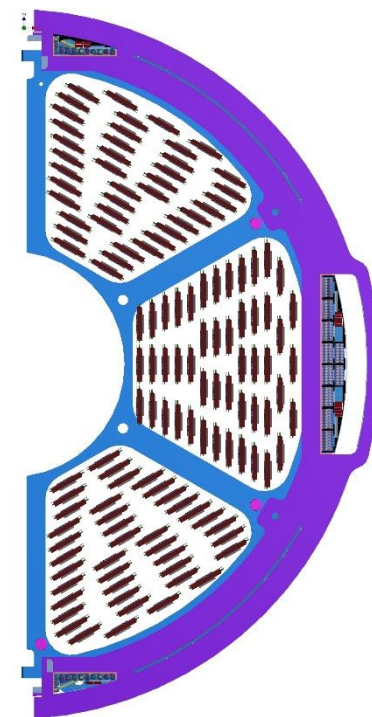


Readout System Update: ASIC/TRB

- Order new FE-PCBs: PANDA-STT “pre-series” version
 - v3 with smaller size, no analog out, connectors changed
 - additional: v4 with analog out all channels for general straw test systems

- Order new ASICs & PCBs
 - 250x ASICs, 125x PCBs
 - 100x PCB-v3: 46x HADES-STs, 54x PANDA-STT
 - 25x PCB-v4

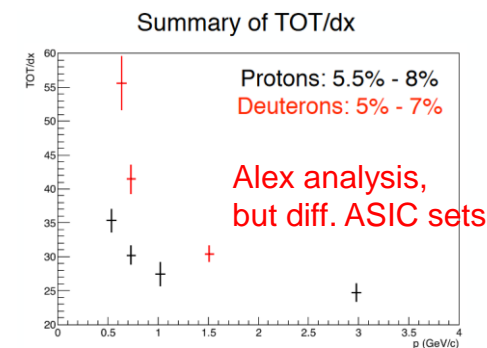
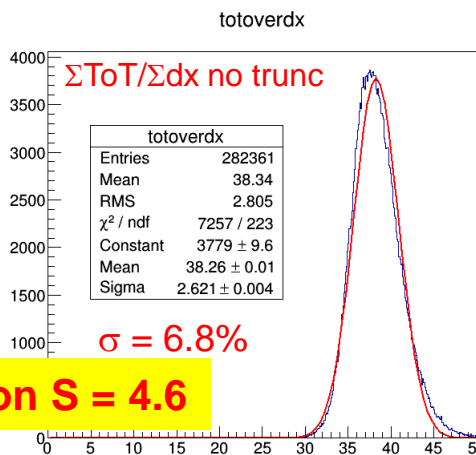
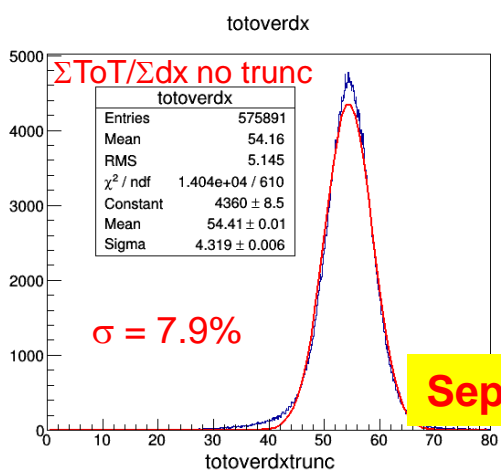
- Front-end area layout in progress
 - Single straw – FEB association, optimisation done
 - 135x FE-PCB per semi-barrel (2160 ch, net: 2112 ch)



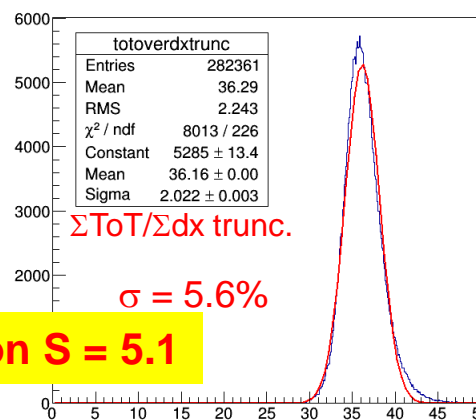
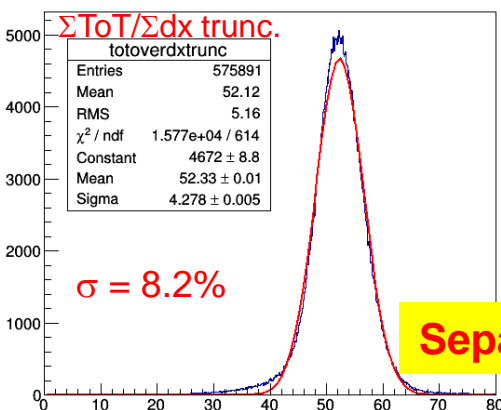
CAD-Layout of ASIC front-end boards

Prelim. ToT Separation Power (for Deuteron & Cosmic)

- use $\Sigma \text{ToT} / \Sigma dx$ per track (top figures), gives better distribution symmetry than $\Sigma(\text{ToT}/dx)$
- truncate single ToT/dx with lowest and highest entries (bottom figures)
- preliminary:** S ~ 5.1 separation power, S ~ 9 in TDR (π/K at 0.23 GeV/c), similar to Pawel's results



**Separation S = 8.1
(600 MeV/c deuteron - mip)**



**Cosmics (mip)
prelim, ongoing.**

600 MeV/c deuteron

1500 MeV/c deuteron

Cosmic (MIP)