PANDA Straw Tube Detectors and Readout

PANDA = Antiproton annihilation at Darmstadt fixed target experiment for studies of $\bar{p}$-p and $\bar{p}$-A collisions in momentum range 1.5-15 GeV/c

The poster presents read-out electronics for Central Tracking System (ST) and Forward Tracking System (FT) of the PANDA experiment.
PANDA Straw Tube Detectors and Readout

Detector build from straw tubes

Front end electronics based on PASTTREC chip

Read out platform TRB3 (with FPGA based TDC)

Results

- Time over threshold method for particle identification
- Drift time for track finding. Spatial resolution 159μm

Mean value of ToT for Fe-55

1800V
159 μm (σ) all Radil

Charge [pC]