# Analysis Plans

16.08.2010

# Hard Disk

- Transcend hard disk?
- Where to store data?
- Full back up ~ 40 GB

# Calibration

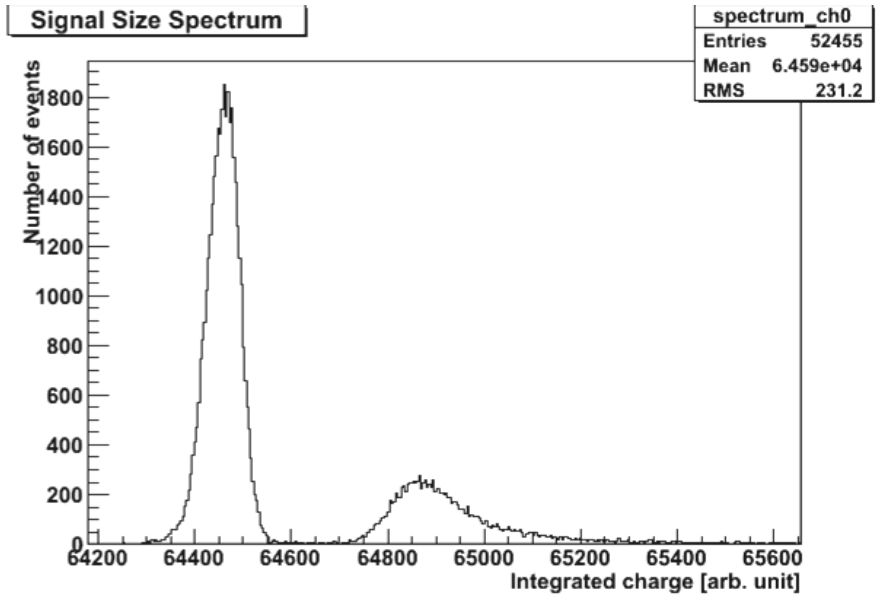
- Absolute calibration (Lab)
  - All channels with known pulse
  - Linearity (Q induced vs. signal size [ADC channels])
- Calibration to the same level for all pads (Lab & Test Beam Data)
  - Check stability between measurements
  - Calculate coefficients for every pad (compare with Lab measurements)

# Numbering

- ABCDE
- A – ADC Channel (0 .. 7)
- B – R/O chip number (1, 3, 5)
- C – chip channel number( 0 .. 7)
- D – pad region (2, 4)
- E – pad number in the region ( 1 .. 8)

# Noise Investigations

- Coherent noise
  - Read event by event (like in realSpectra.C)
  - For one pad set threshold to select only signals
  - Correlation between pedestals(noise) in different channels(without signals)
  - To take different window



# Cross-talk

- Negative or positive?
- Cross-talk for connected and unconnected pads?
- How to:
  - Read event by event (like in realSpectra.C)
  - For one pad set threshold to select only signals
  - Plot spectra for neighboring channels (shape should repeat spectra of signals in smaller scale)
  - Correlation between signals in main pad and channels with cross-talk

# Data Analysis (Sbox)

- Script for fitting spectra
- S/N ratio and its stability for every channel
- CCE and CCD calculations (absolute calibration is needed)

- Sbox irradiation with source in the Lab and measure CCD and S/N ratio ?

# Data Analysis (Sbox + Telescope)

- To understand difference between number of triggers
- Time sinchronization
- Tracking and hit position inside Sbox
- Read both files simultaneously
- Study uniformity of pads response
- Study charge sharing between pads

# Questions???

- Do we need to bond other channels back?
- Should we scan all channels of the sensor?