Preliminary Event Selection and Check of Charge Distribution

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Cluster Counting Meeting

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Event Selection

Parameters

1cm×1cm

red   10 µm wire (Mo)
blue   15 µm wire (Mo)
green   20 µm wire (W)
orange   25 µm wire (W)
violet   40 µm wire (Al)

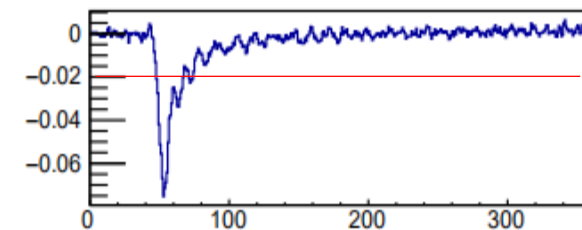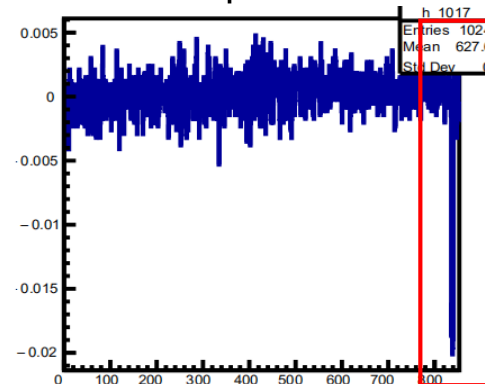µ-beam

- Study focused on the 1cm tubes
- Event selection
  - Remove the points with abnormal values
  - For a good waveform, the maximum value of the absolute amplitude after subtracting the baseline should be more than 0.02mV
  - For a good event, at least four tubes with signal is required

Determination of baseline

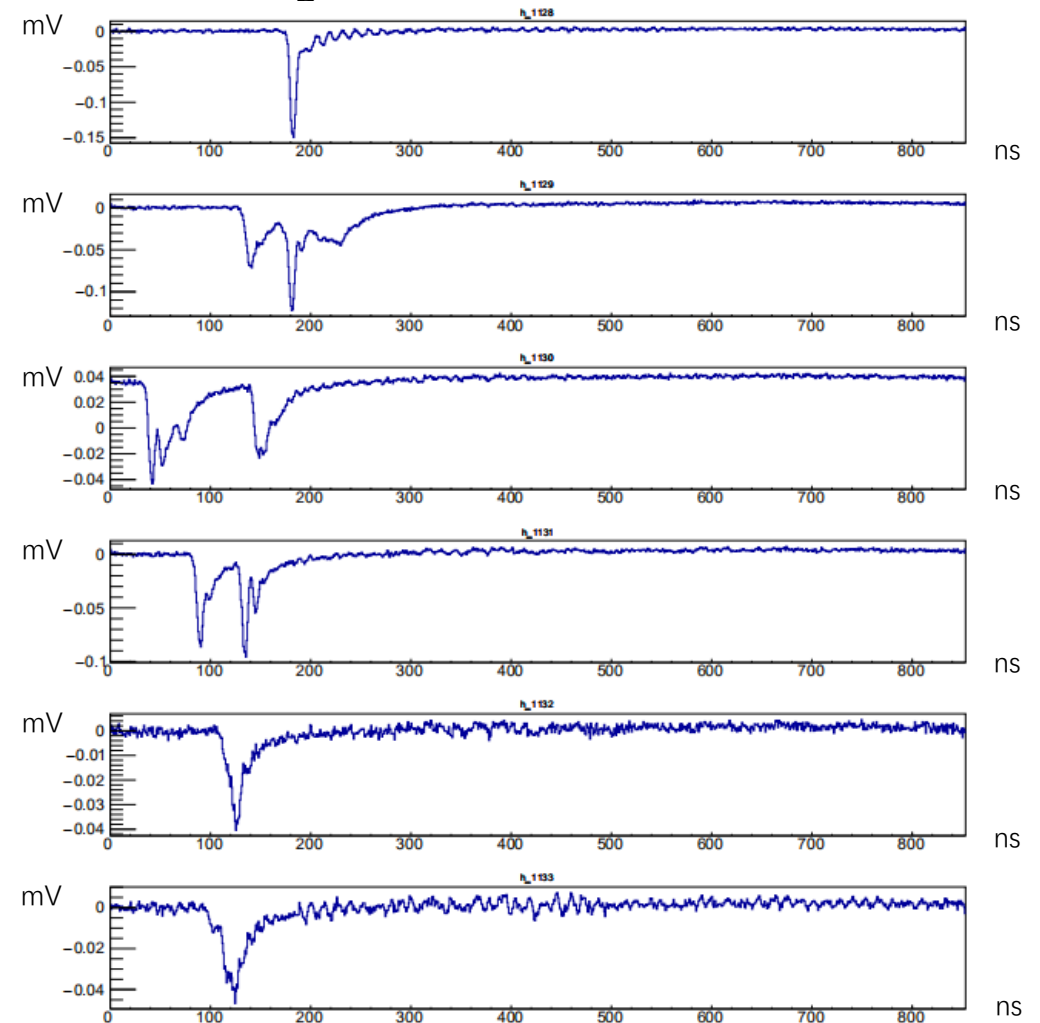- The averaged amplitude of 50 consecutive bins on the right box

Preliminary results

A good event after selection
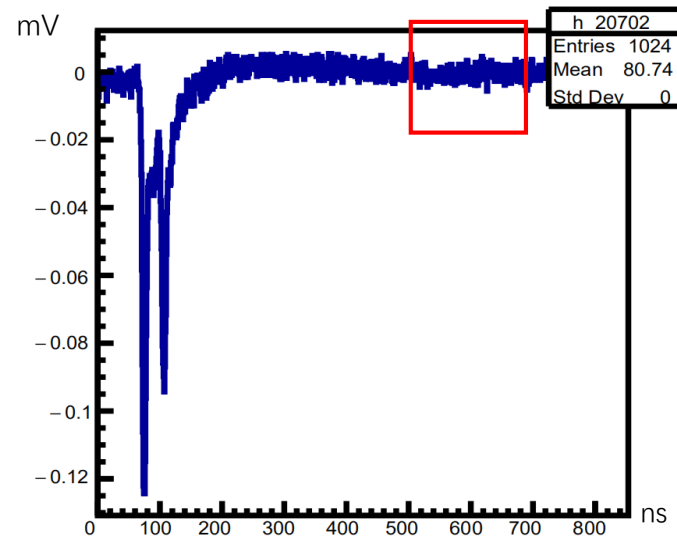
muons_165GeV_voltagePlus10V_angle0_GSPS1p2_delay725ns_7Nov_0758		
total events : 5000		
Number of tubes with signal	Number of event	proportion
0	4042	0.8084
1	79	0.0158
2	73	0.0146
3	69	0.0138
4	61	0.0122
5	123	0.0246
6	553	0.1106

Charge distribution
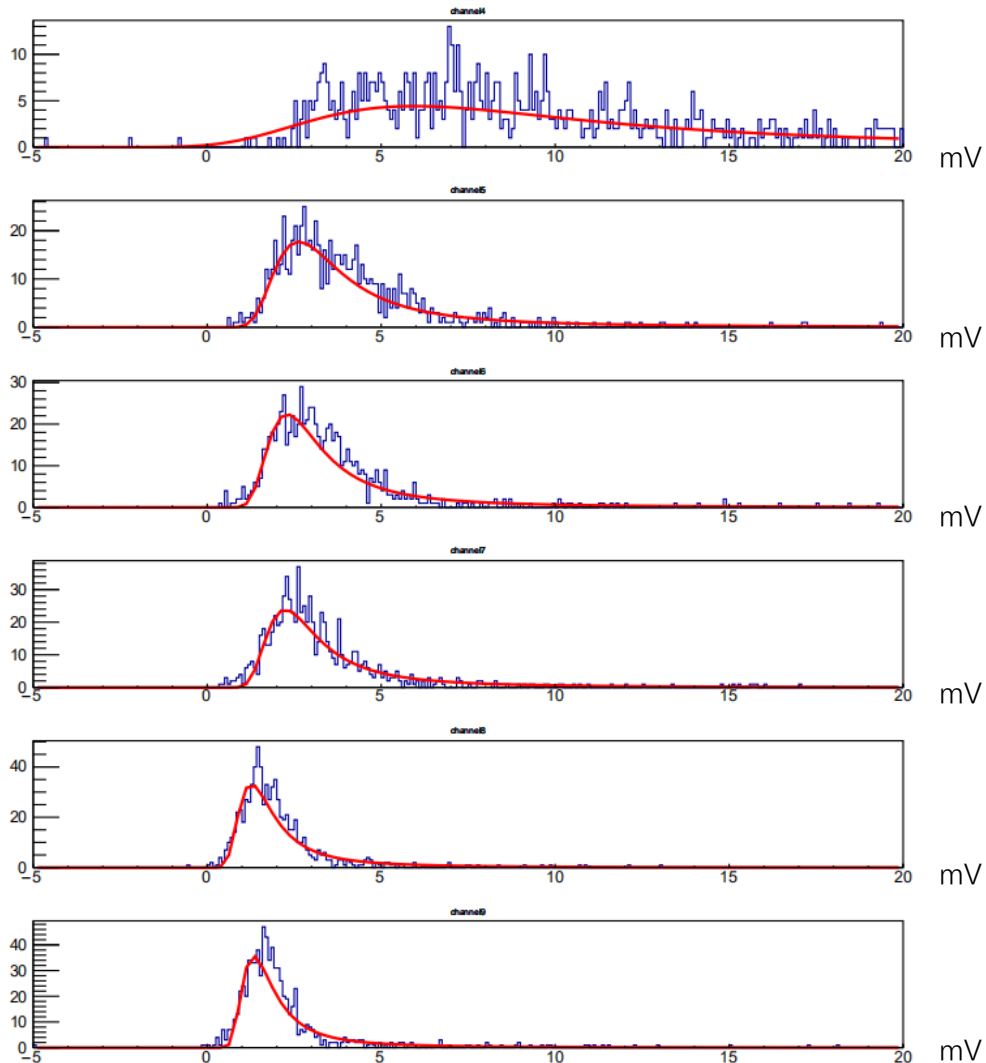
- charge distribution of each tube obtained

- fitted to Landau distribution

Next to do

- Analysis with peak finding algorithm.