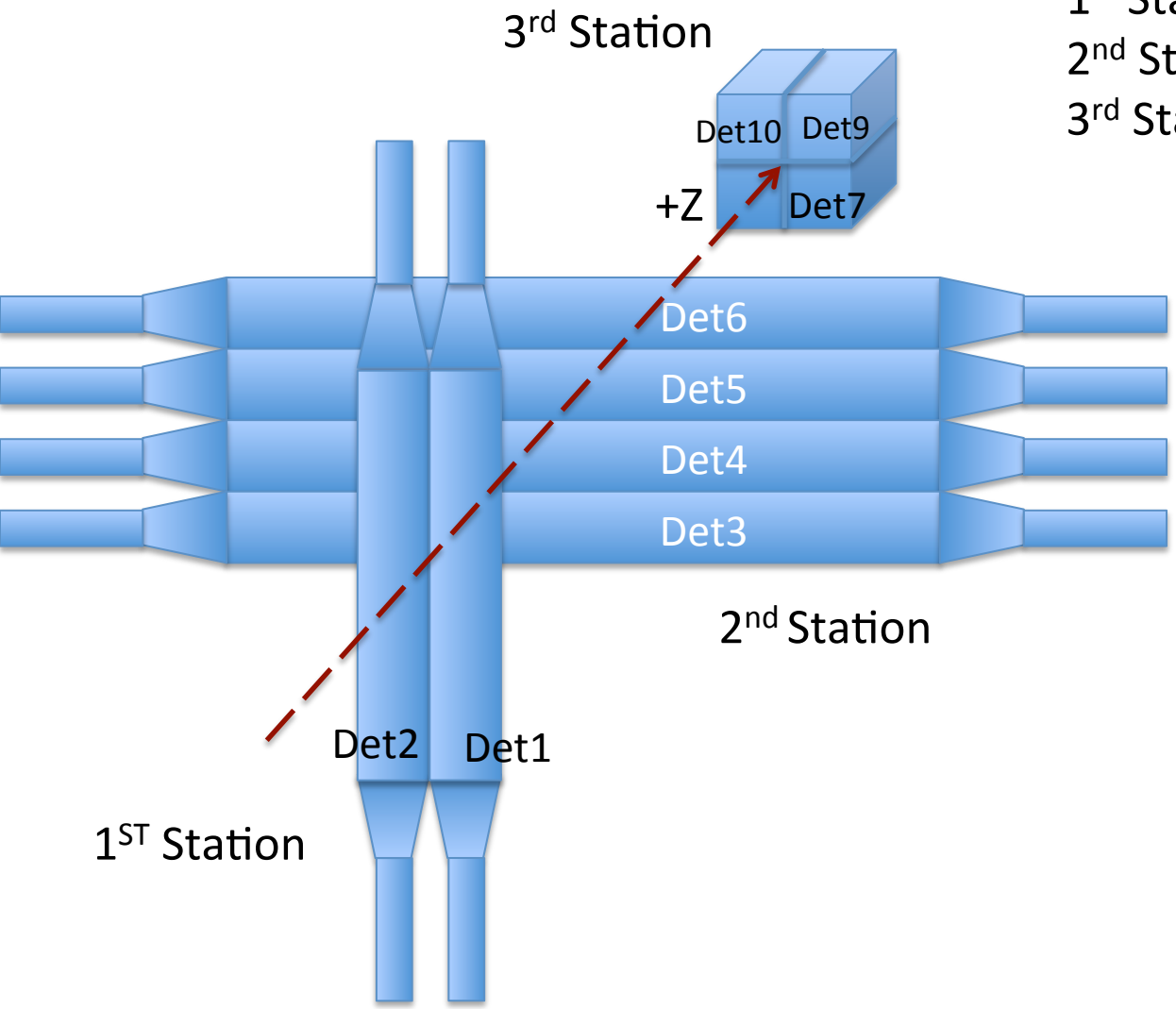
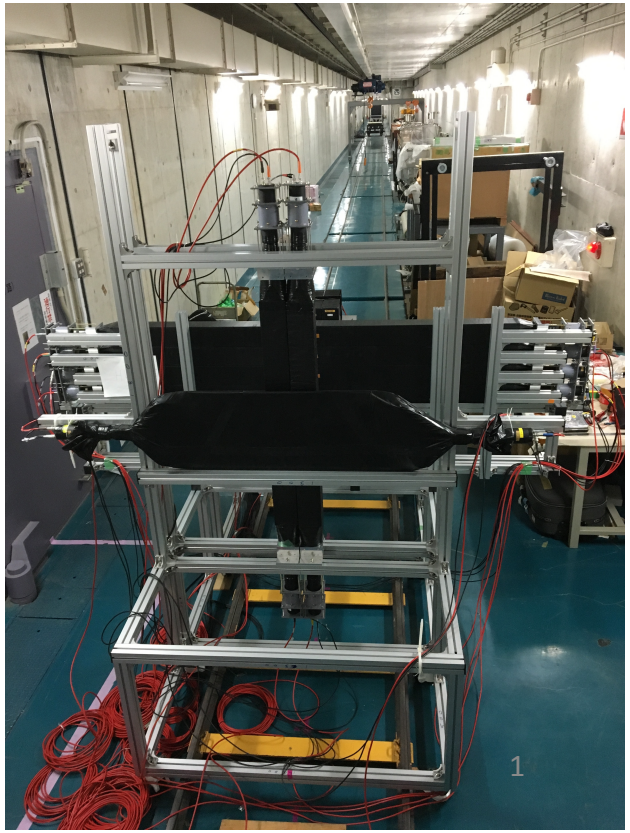
Detector Setup

Scintillator : 11 개
PMT : 18 개
- Detector Size
  1st Station : 2 (10cm*100cm*10cm)
  2nd Station : 4 (200cm*10cm*10cm)
  3rd Station : 4 (10cm*10cm*20cm)

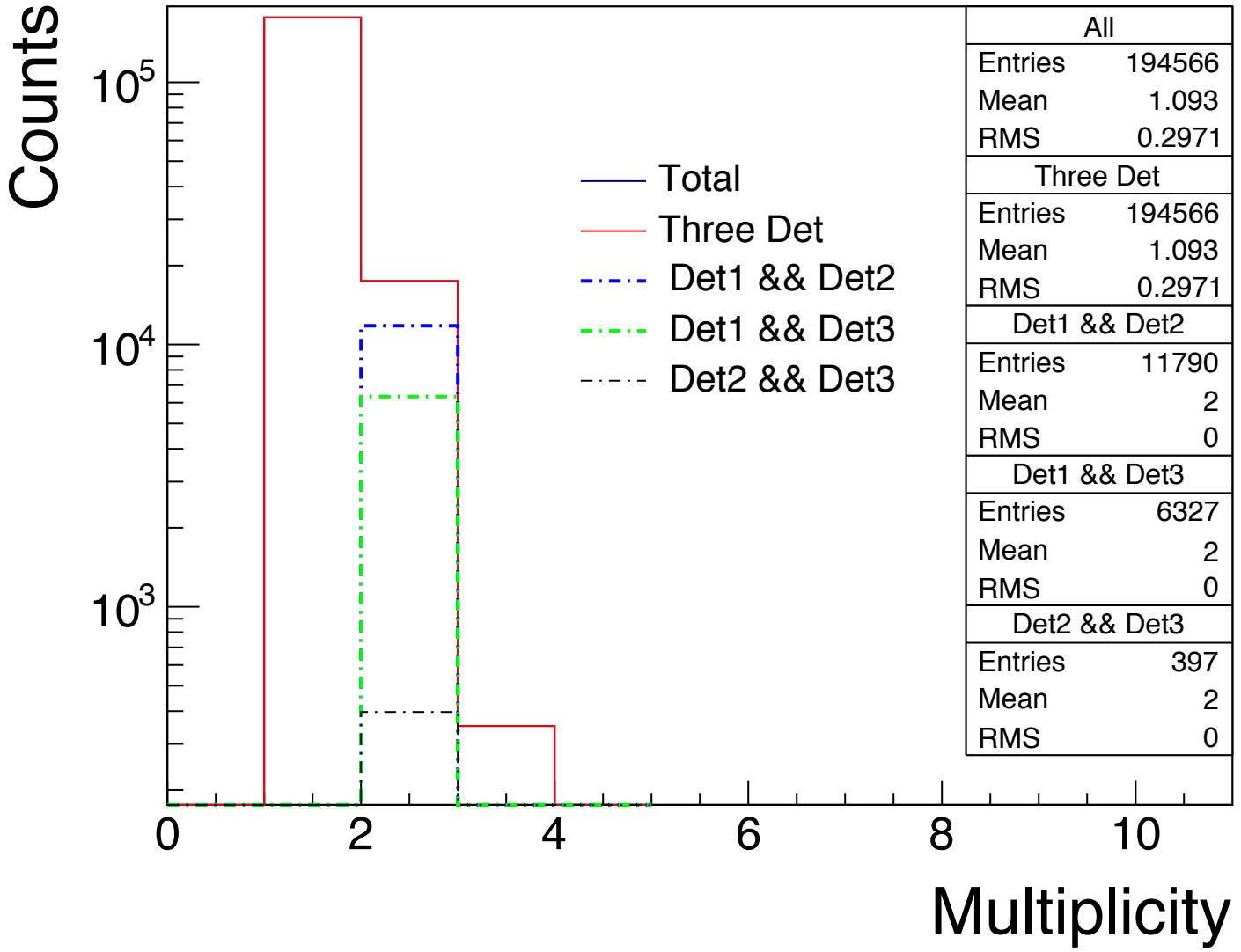




Multiplicity

Experiment

- 392 MeV
- Eth = 10 MeV

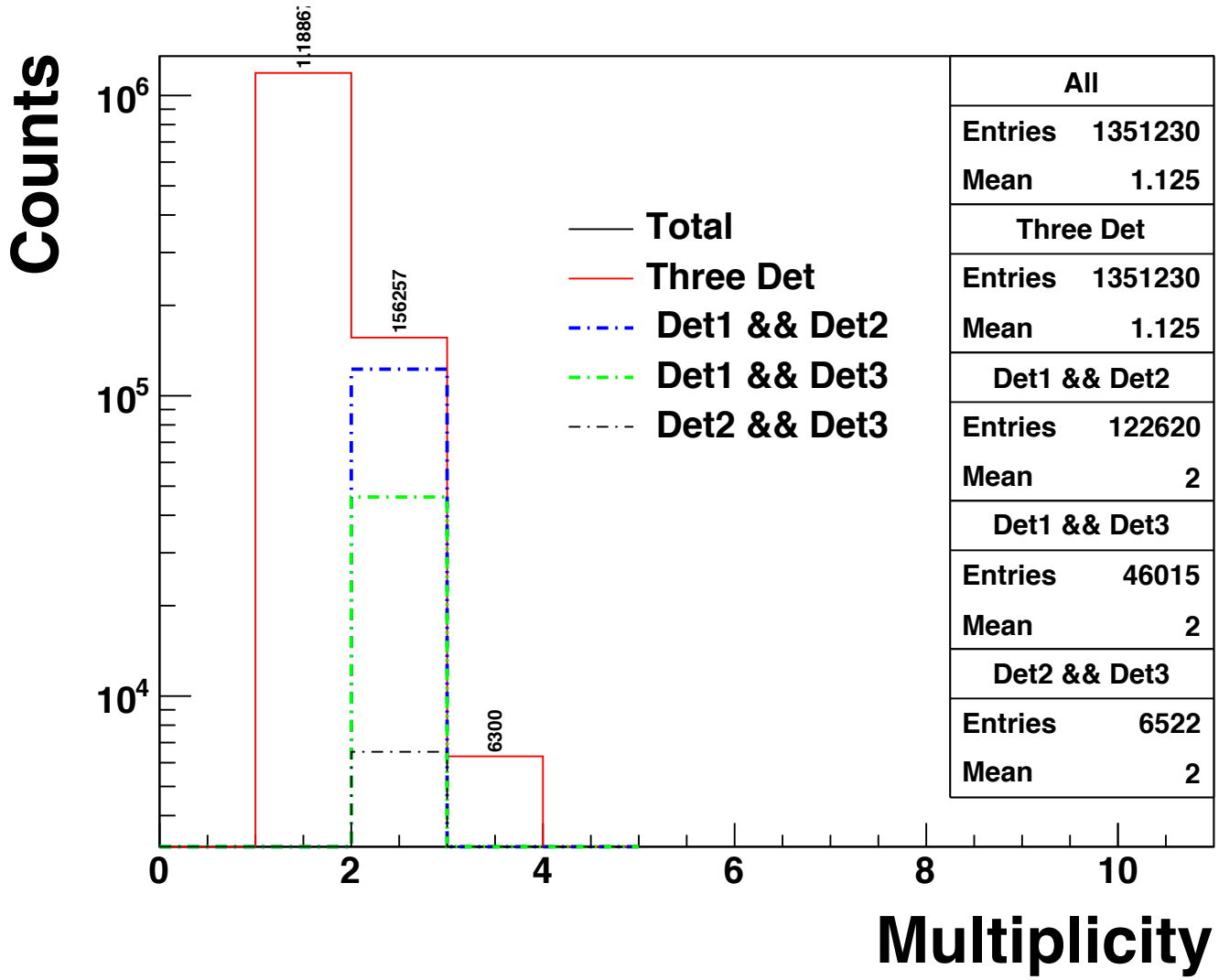


Multiplicity

After event selection (10 RUNs)

Eth = 10 MeV

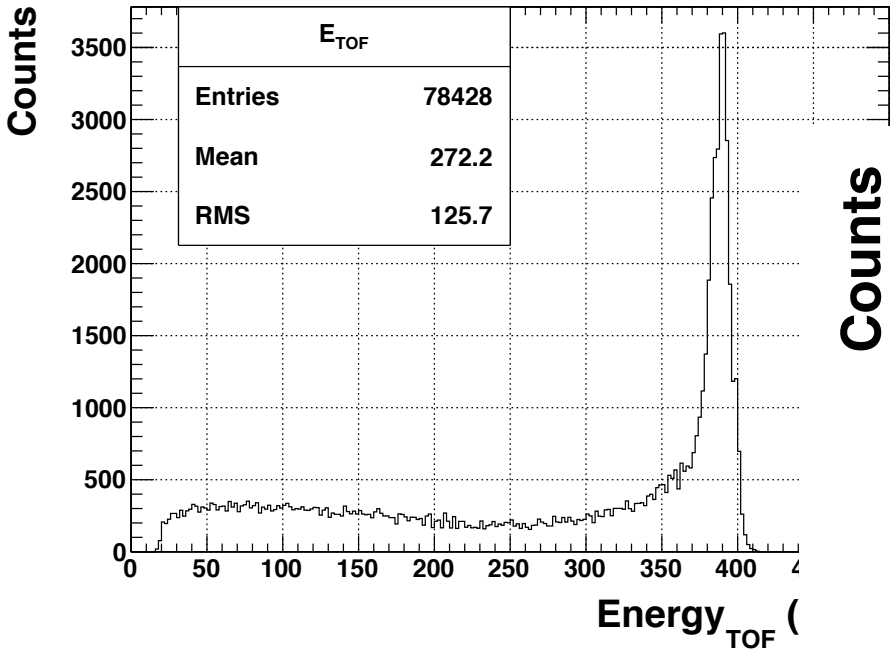
Experiment (selected events)

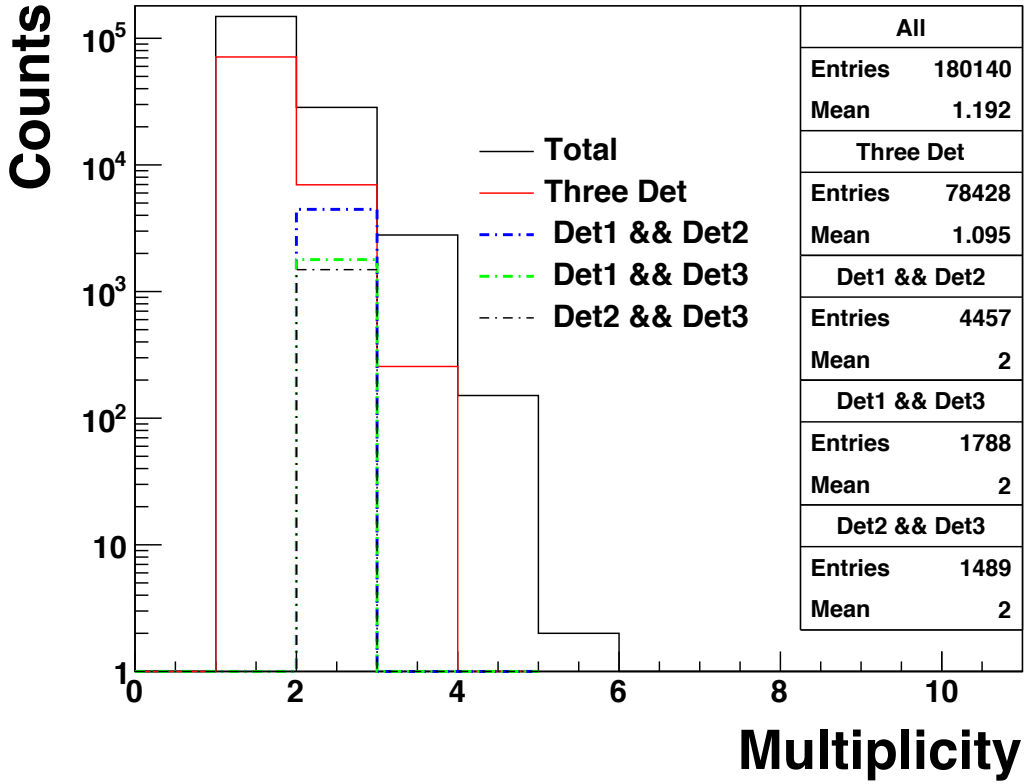


Multiplicity

Simulation

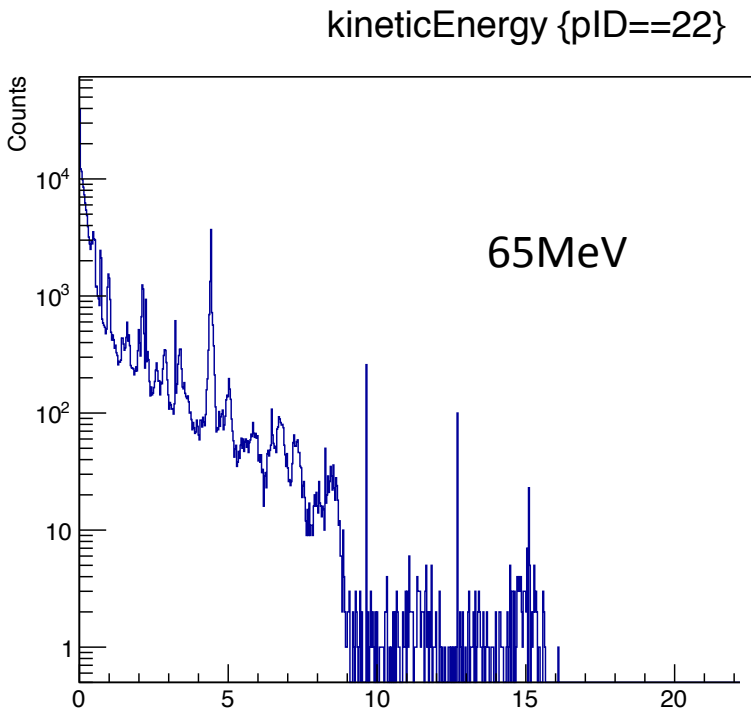
- Number of events : 10^6
- Incident neutron energy : 392 MeV Experiment E_{tof} spectrum
- Total: 10 detector , Three Det : working detector
- Eth = 10 MeV

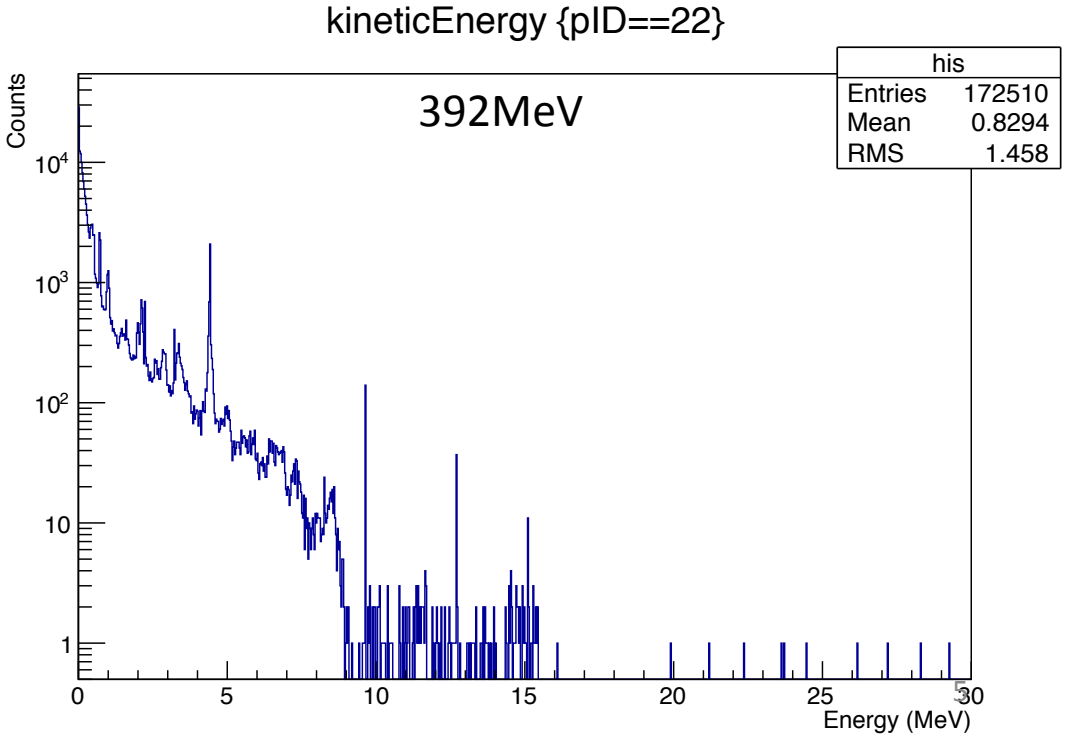




Produced Gamma within detector

Simulation





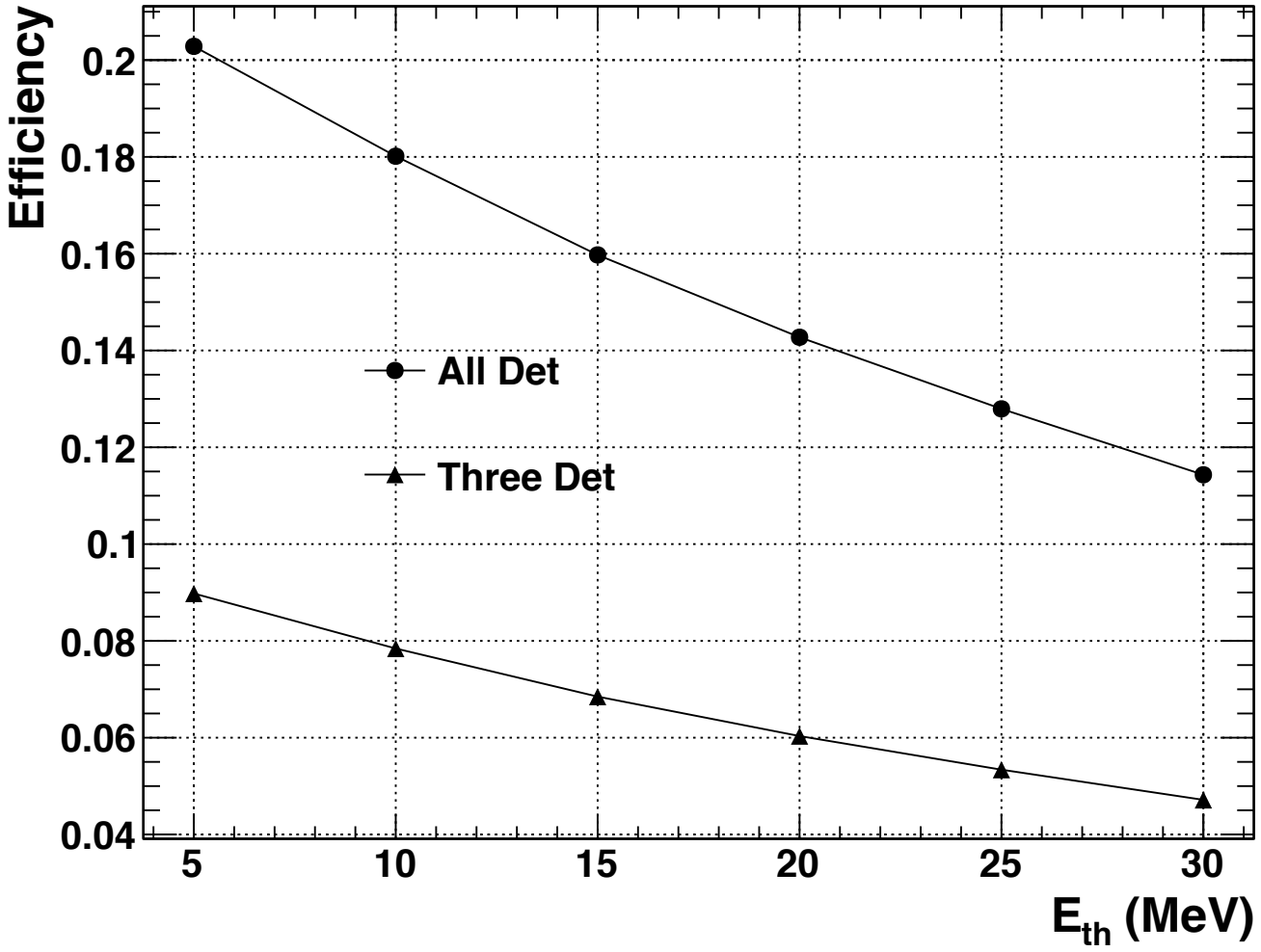
Efficiency with different threshold

Simulation

Number of events : 10^6

Incident neutron energy : 392 MeV Experiment E_{tof} spectrum

All Det : 10 detector , Three Det : working detector



Rate (multiplicity >1) comparison between experiment and simulation with different threshold

Selected Events

Same event category : 1. deltaT< 5ns (same ST)

2. E_{tof} >= dE_{total}

3. L/v < deltaT

$$Rate = \frac{\sum_{2}^{n} multiplicity}{\sum_{1}^{n} multiplicity}$$