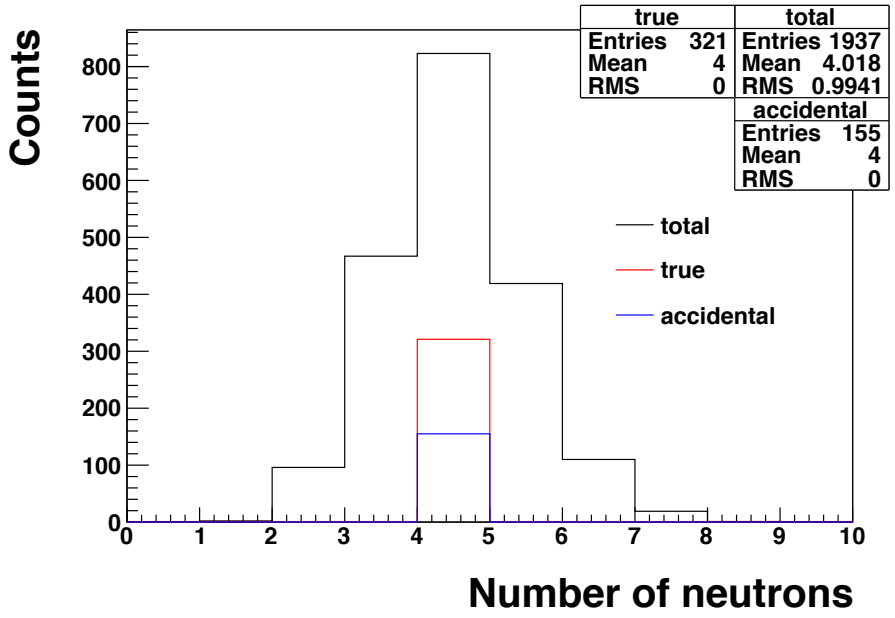
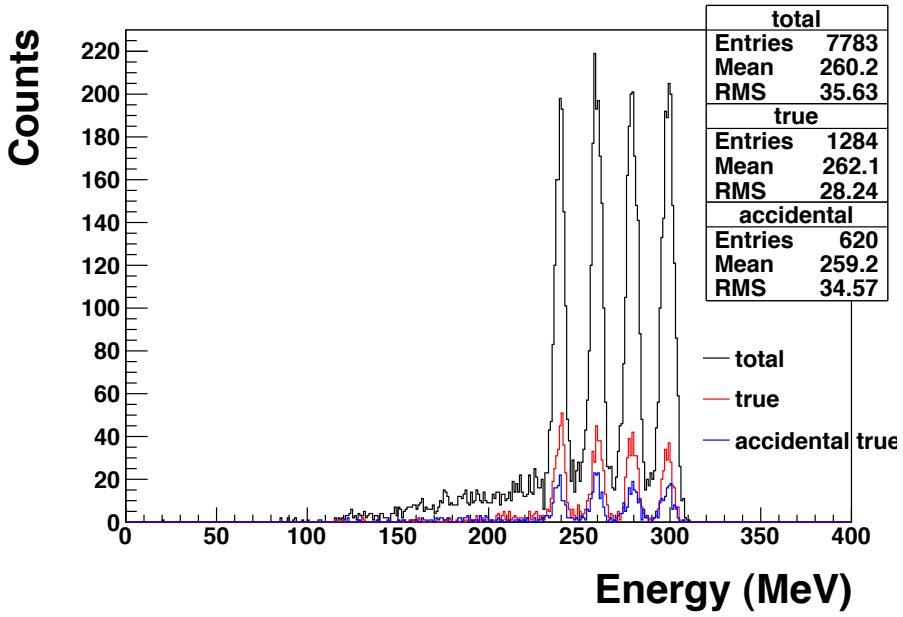
Reconstructed neutron number & energy

Lab meeting 2014 11. 10

Hyunha Shim

4 neutrons (300, 280, 260, 240 MeV)



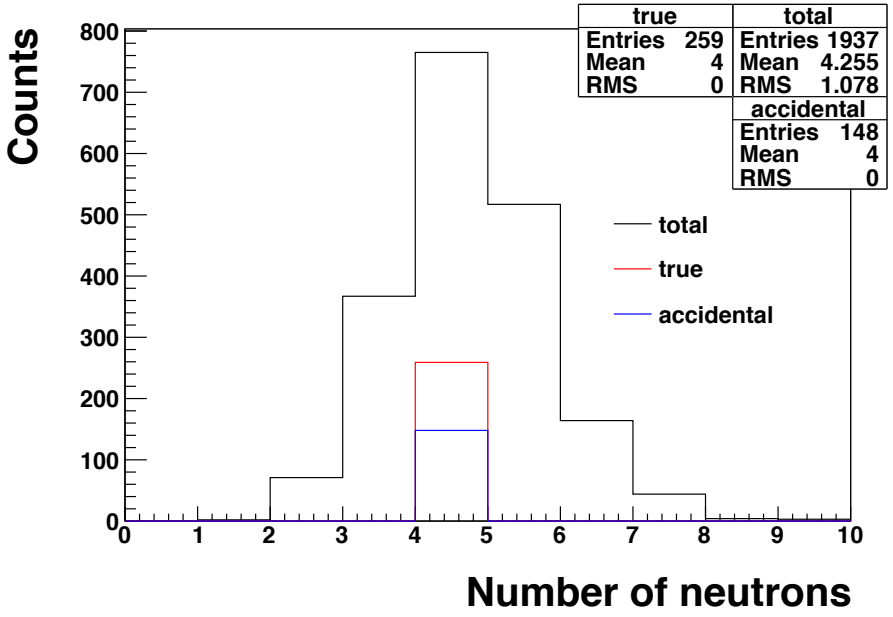


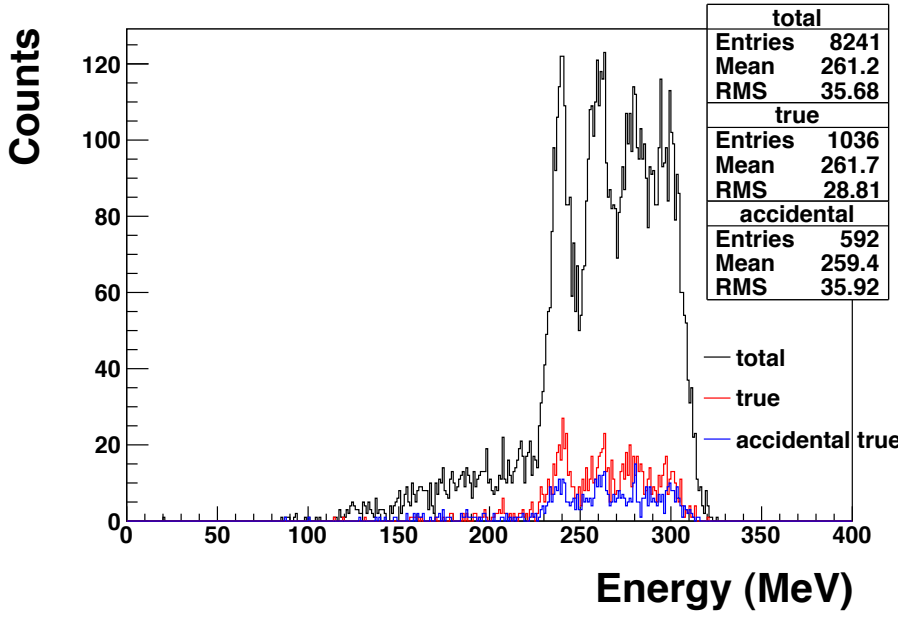
- Beam condition :
  - 5000 events(1 event include 4 neutrons)
  - 10 m distance in front of detector
  - XY momentum sigma 0.05
  - Energy(MeV) 300 , 280, 260, 240
- Geometry condition : 4stations with 60cm gap
- Detector condition :
  - Position resolution 6 cm
  - Time resolution 0.3 ns

True : 4 neutron are correctly separated

Accidental : fastest time of four classified group is correctly separated but, group member is mixed

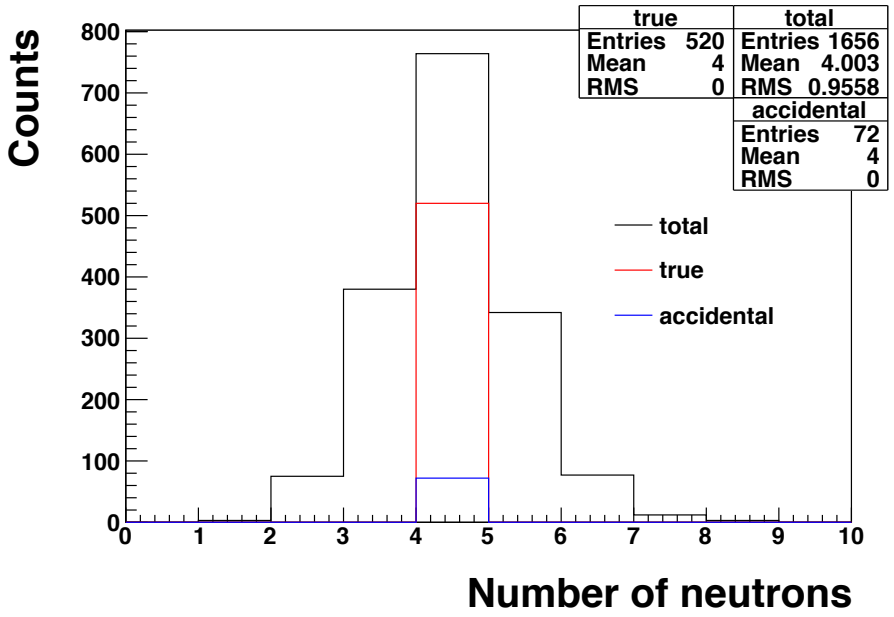
4 neutrons (300, 280, 260, 240 MeV)

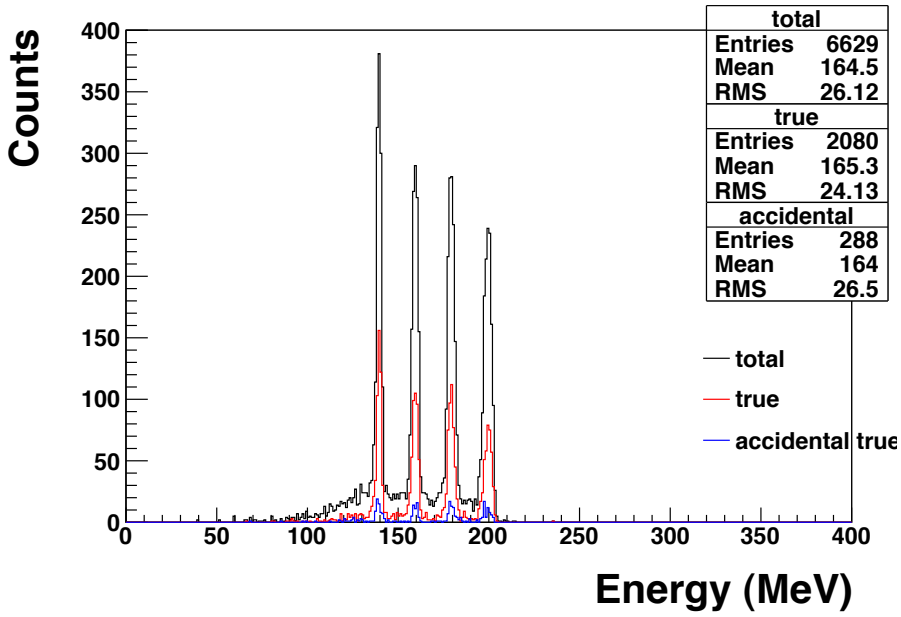




- Beam condition :
  - 5000 events(1 event include 4 neutrons)
  - 10 m distance in front of detector
  - XY momentum sigma 0.05
  - Energy(MeV) 300 , 280, 260, 240
- Geometry condition : 4stations with 60cm gap
- Detector condition :
  - Position resolution 6 cm
  - Time resolution 1 ns

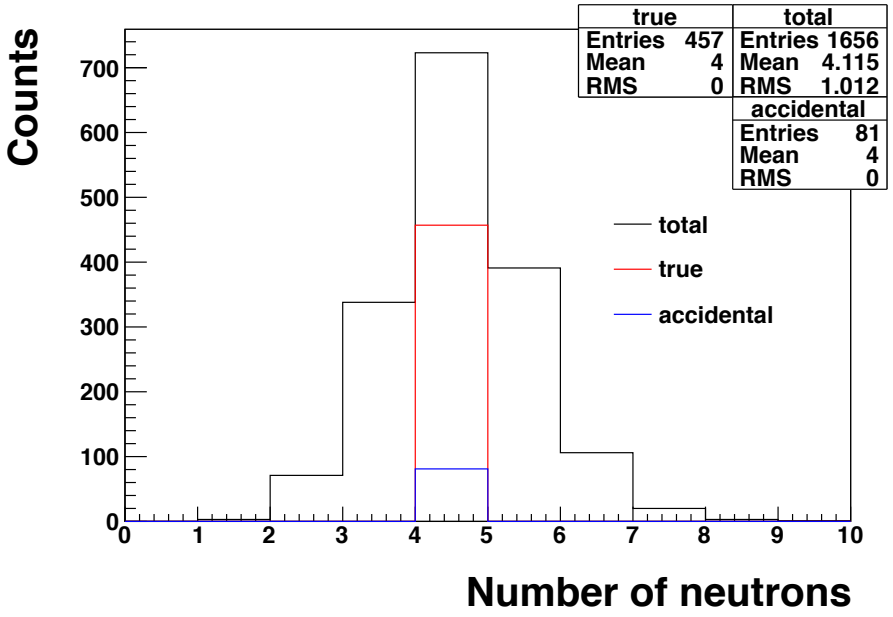
4 neutrons (200, 180, 160, 140 MeV)

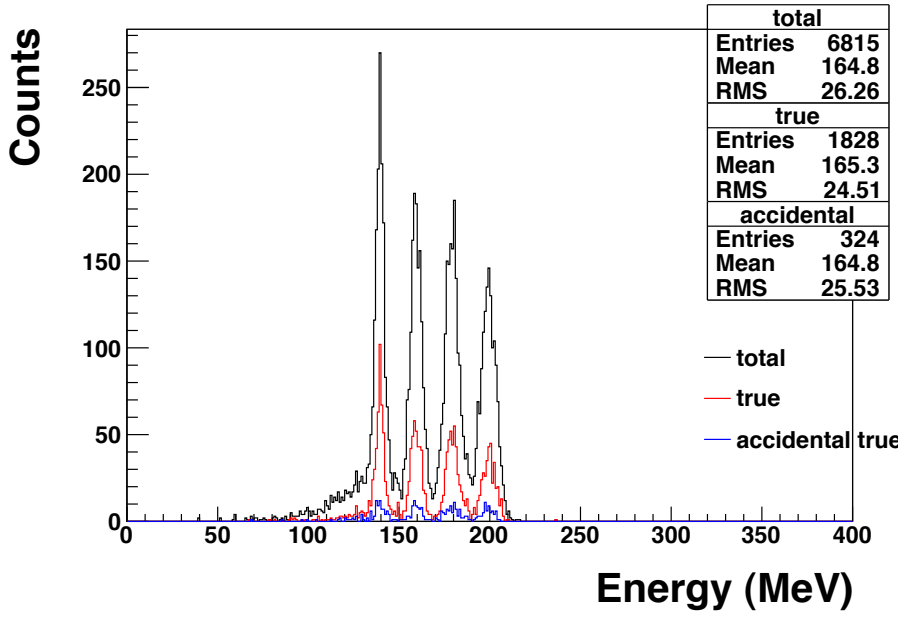




- Beam condition :
  5000 events(1 event include 4 neutrons)
  10 m distance in front of detector
  XY momentum sigma 0.05
  Energy(MeV) 200 , 180, 160, 140
- Geometry condition : 4stations with 60cm gap
- Detector condition :
  Position resolution 6 cm
  Time resolution 0.3 ns

4 neutrons (200, 180, 160, 140 MeV)





- Beam condition :
  - 5000 events(1 event include 4 neutrons)
  - 10 m distance in front of detector
  - XY momentum sigma 0.05
  - Energy(MeV) 200 , 180, 160, 140
- Geometry condition : 4stations with 60cm gap
- Detector condition :
  - Position resolution 6 cm
  - Time resolution 1 ns