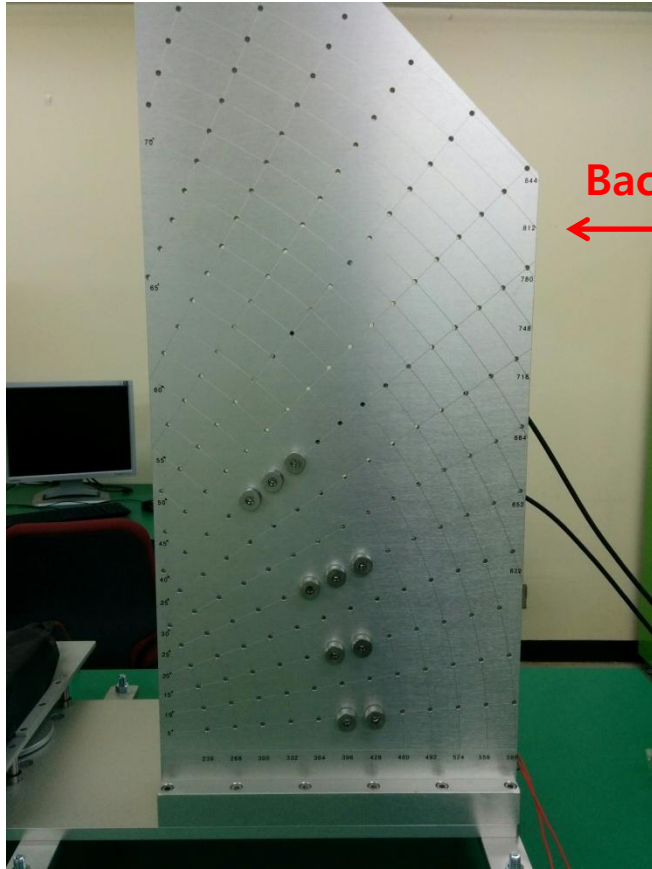
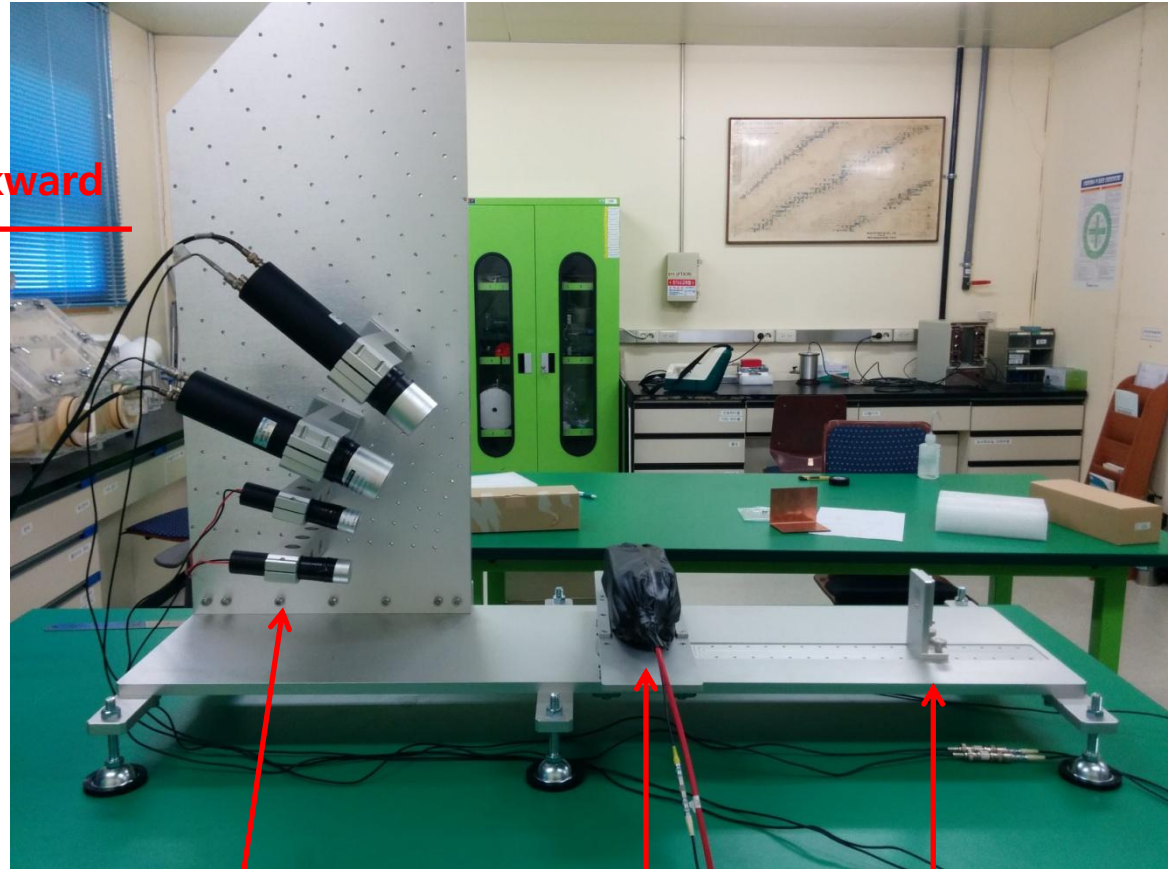


Experimental setup for energy calibration with Ce139 source



Backward



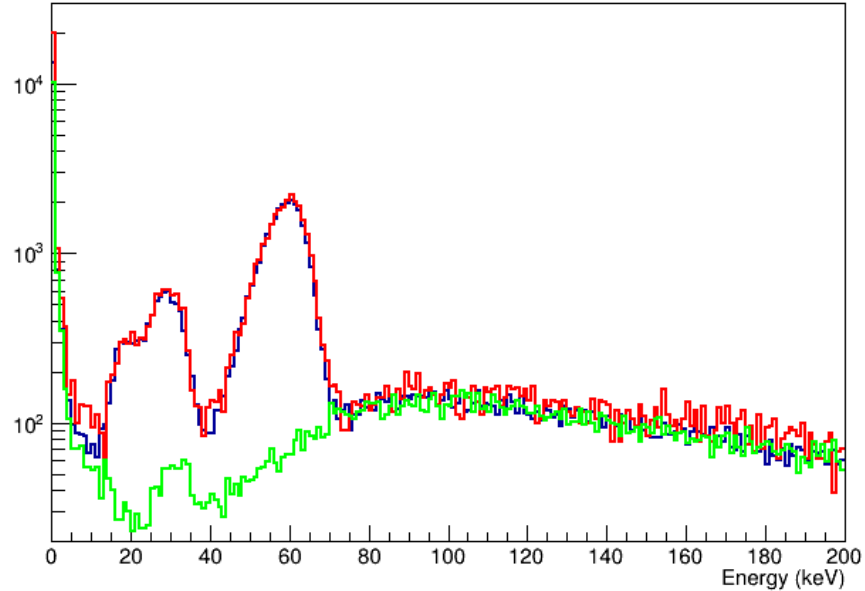
LaBr3
(2 x 1 inch
2 x 2 inch)

NaI

Ce139 Source

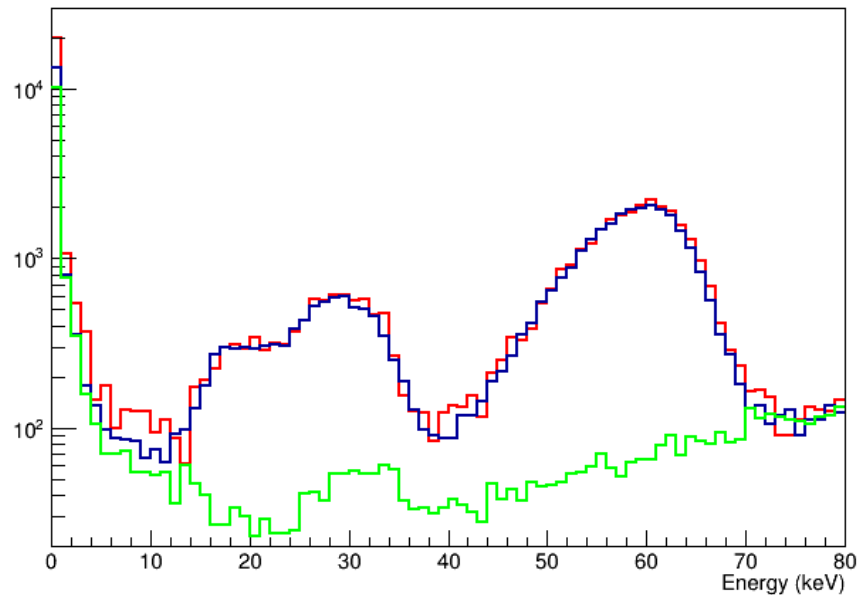
NaI energy calibration with Am241

0~200 keV



Red : Am241 - Generator room (109.9 Hz)
Blue : Am241 - New lab (112.4 Hz)
Green : Bkg - New lab (52.6Hz)

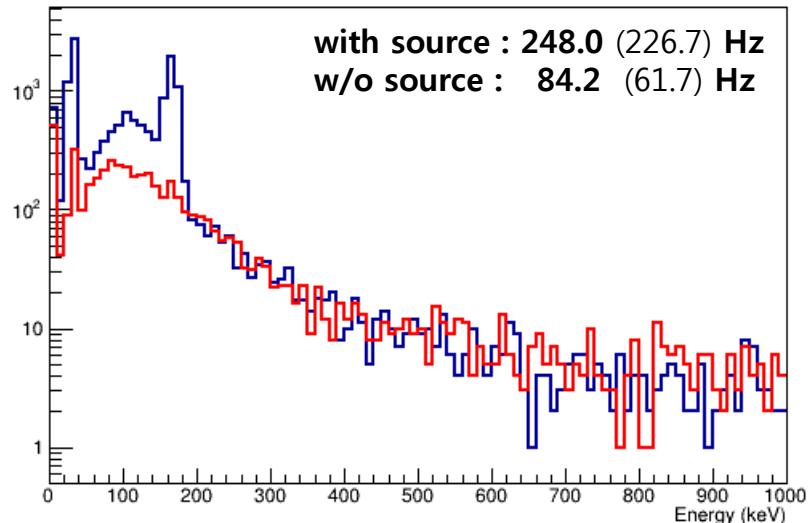
0~80 keV



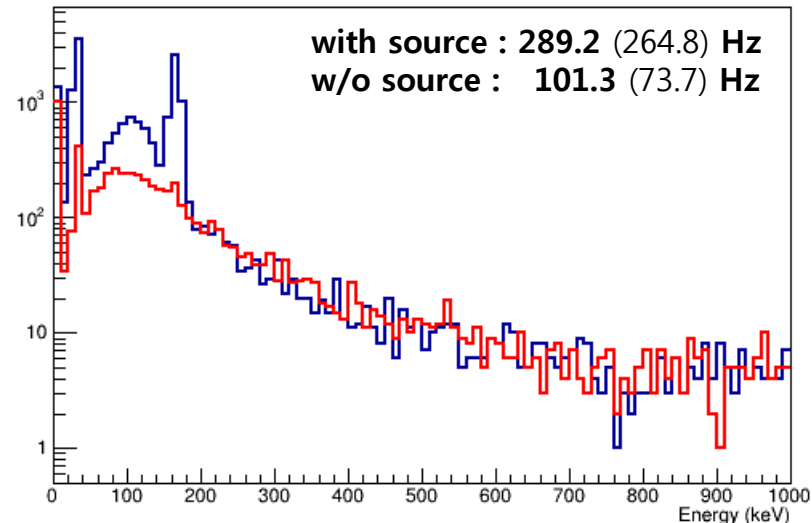
LaBr3 energy calibration with Ce139 (source ~LaBr3 : ~392 mm)

with : 2822.4 (2279.7)
w/o : 1387.9 (775.4)

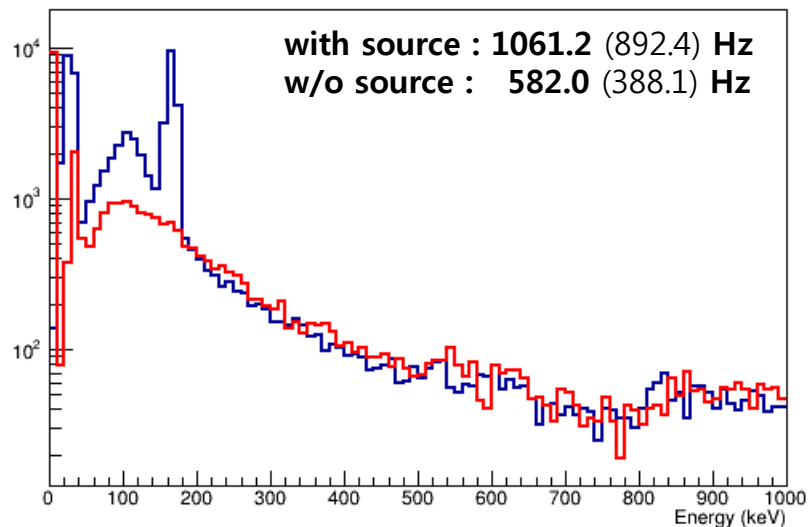
Det1 (1 inch, 5°)



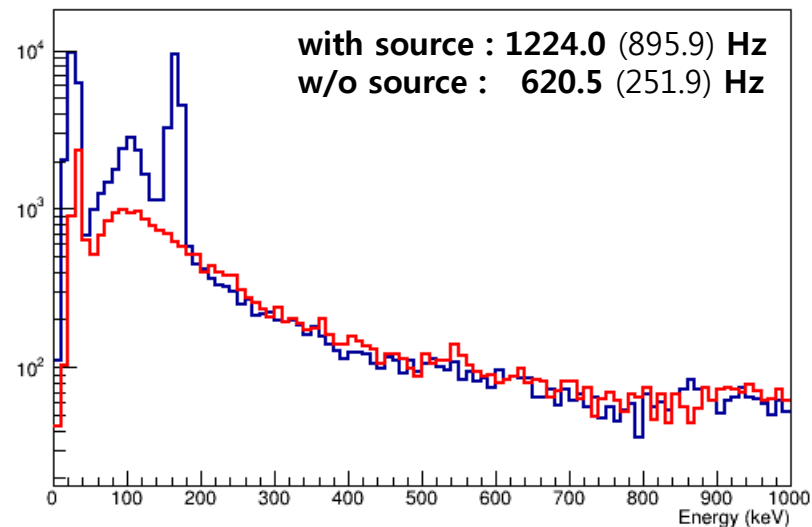
Det2 (1 inch, 15°)



Det3 (2 inch, 25°)

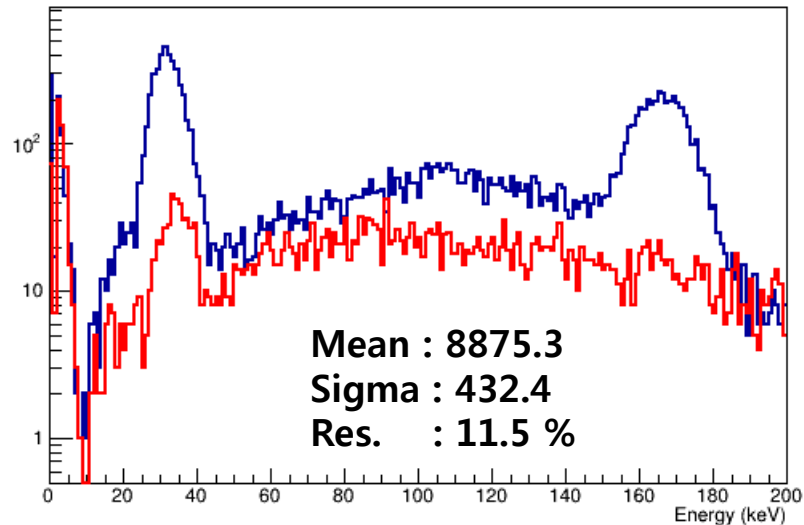


Det4 (2 inch, 40°)

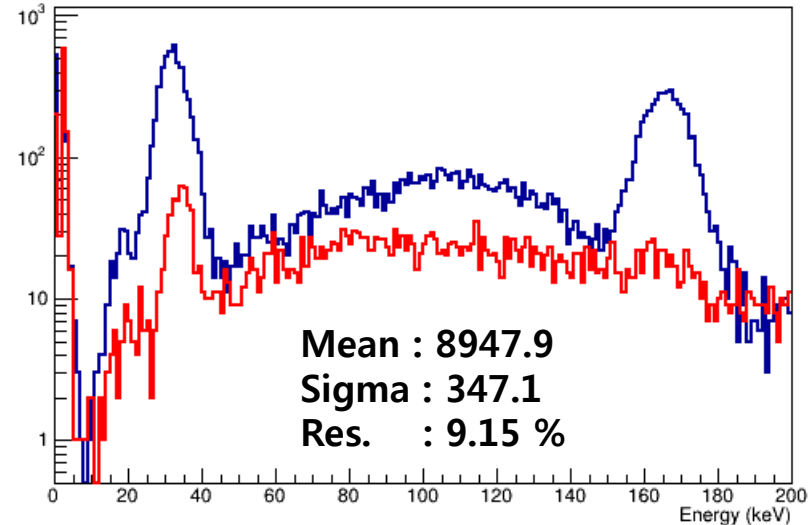


LaBr3 energy calibration with Ce139

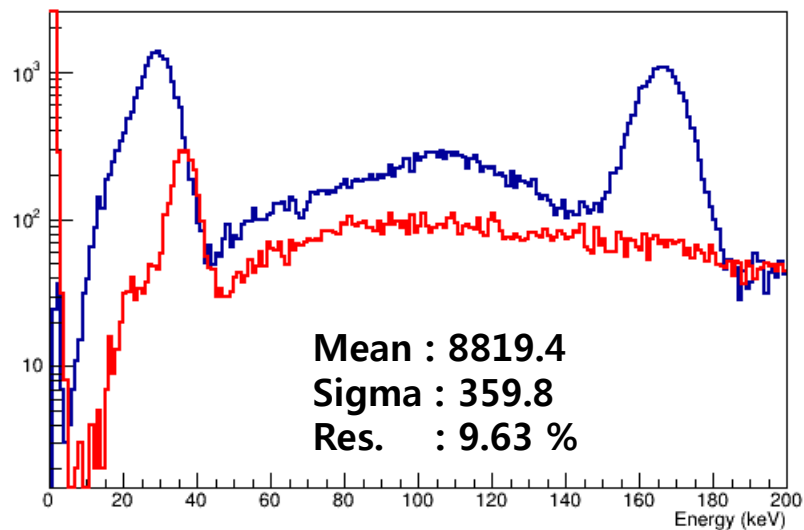
Det1 (1 inch, 5°)



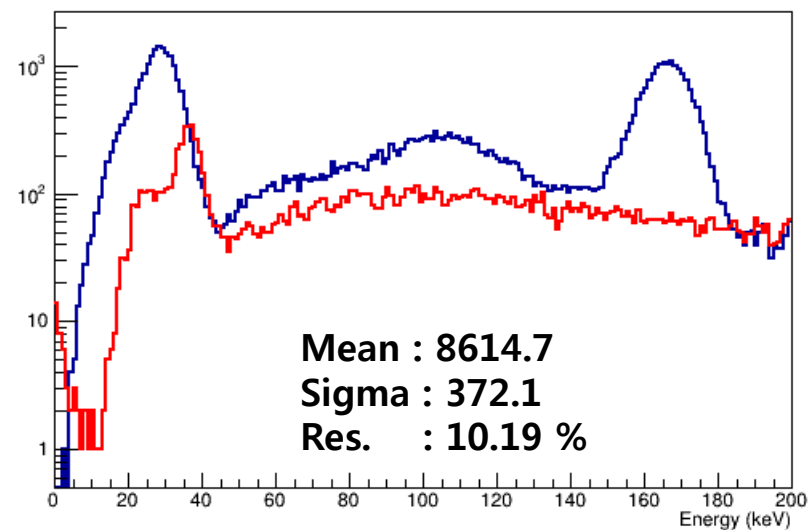
Det2 (1 inch, 15°)



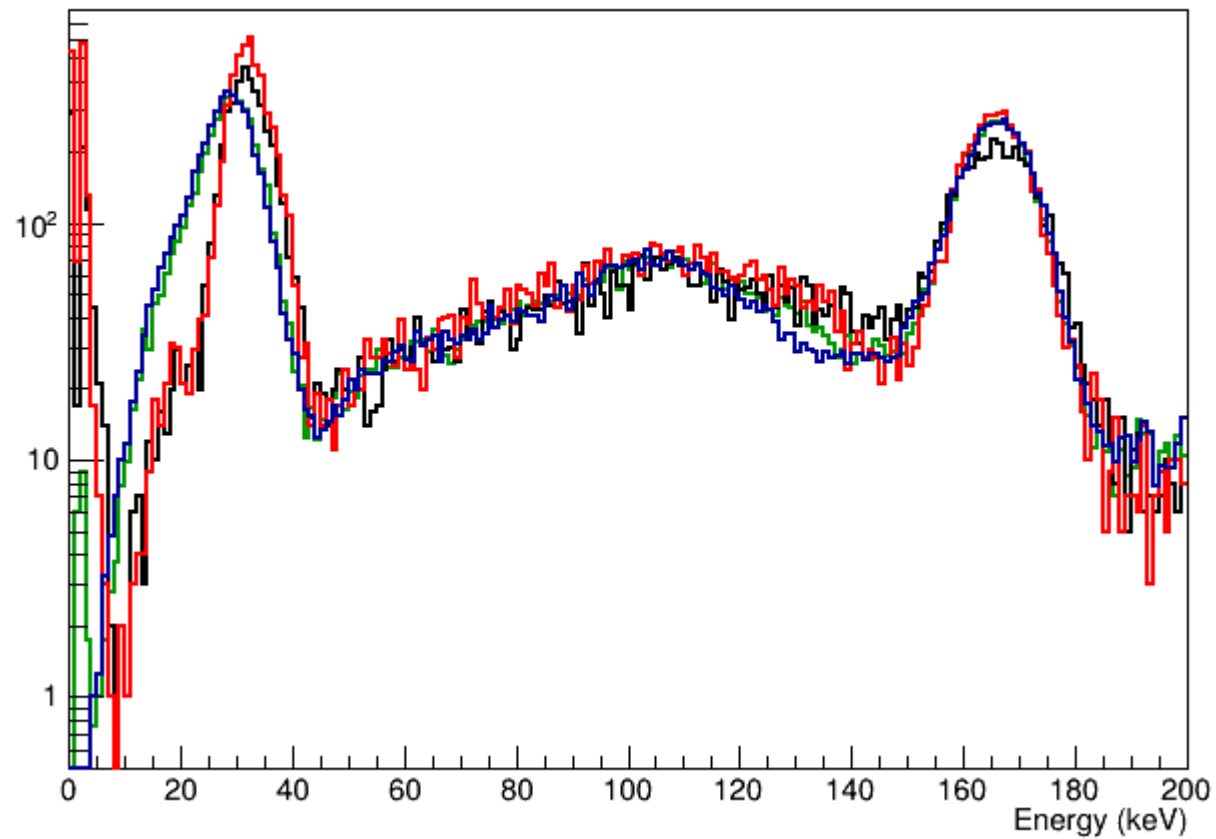
Det3 (2 inch, 25°)



Det4 (2 inch, 40°)



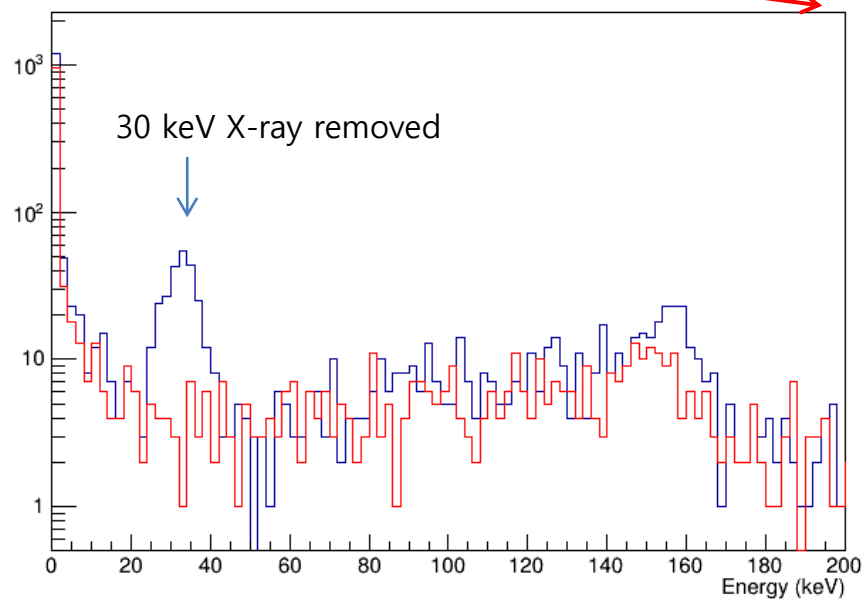
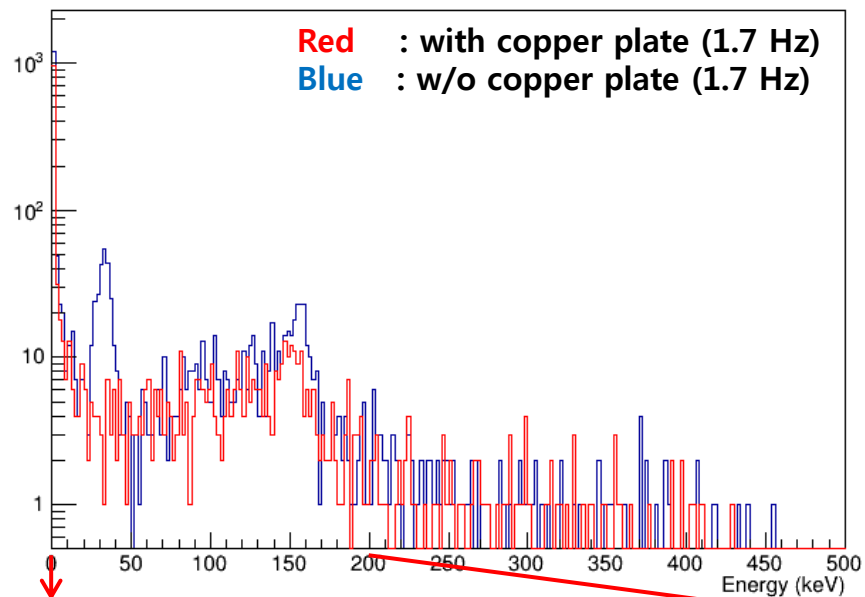
LaBr3 energy calibration with Ce139



Black : Det 1
Red : Det 2
Green : Det 3
Blue : Det 4

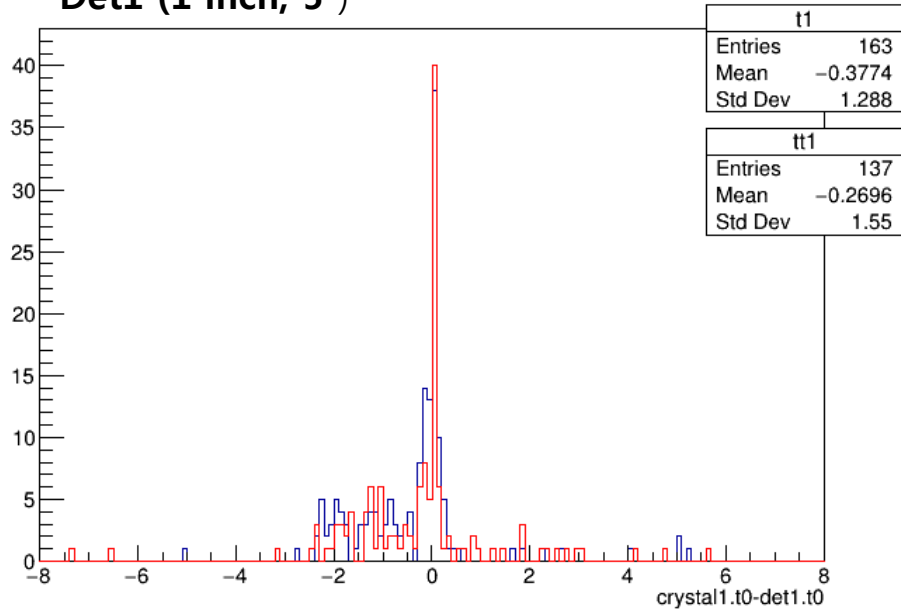
NaI energy spectrum – with/without copper plate

Source $\leftrightarrow$ NaI : 700 mm
NaI $\leftrightarrow$ LaBr3 : 392 mm

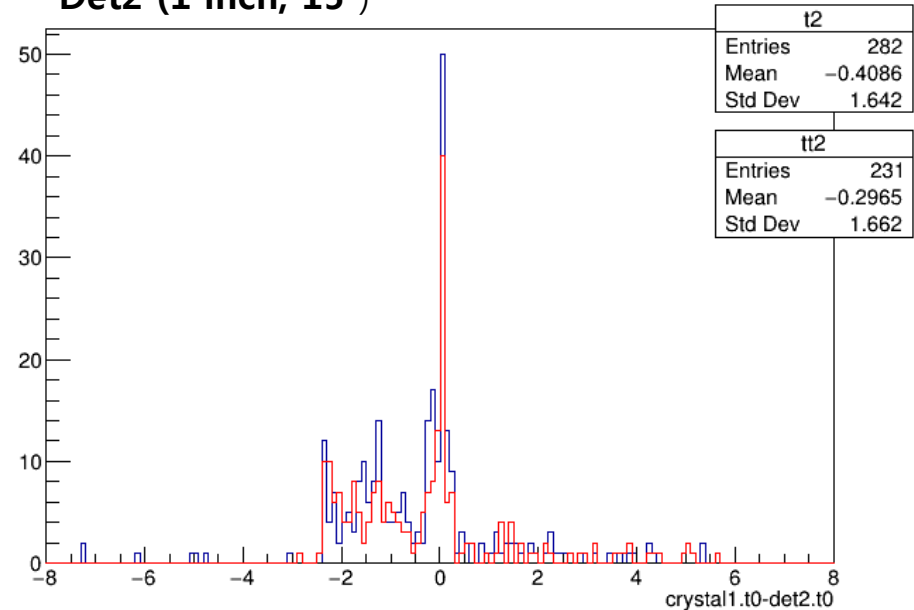


Time difference between NaI and LaBr3

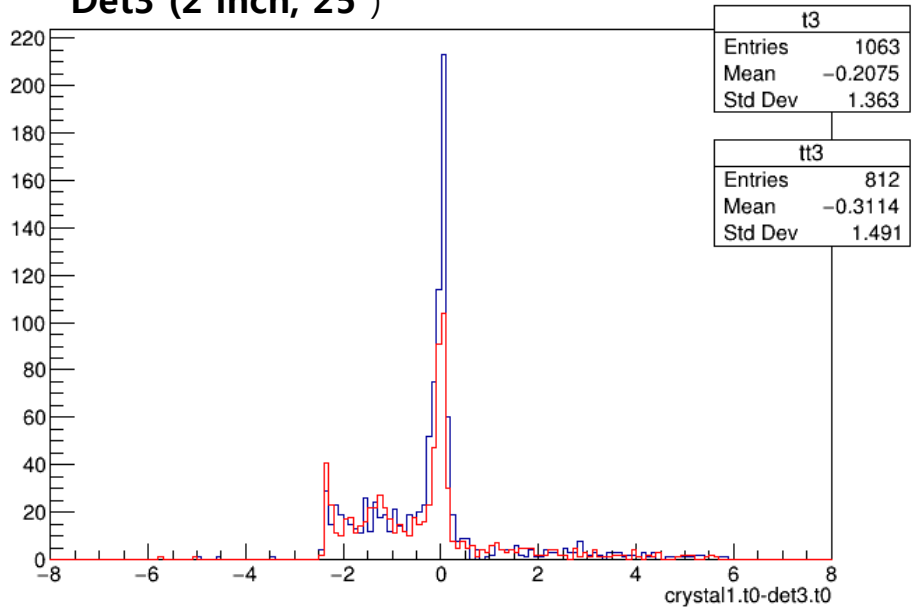
Det1 (1 inch, 5°)



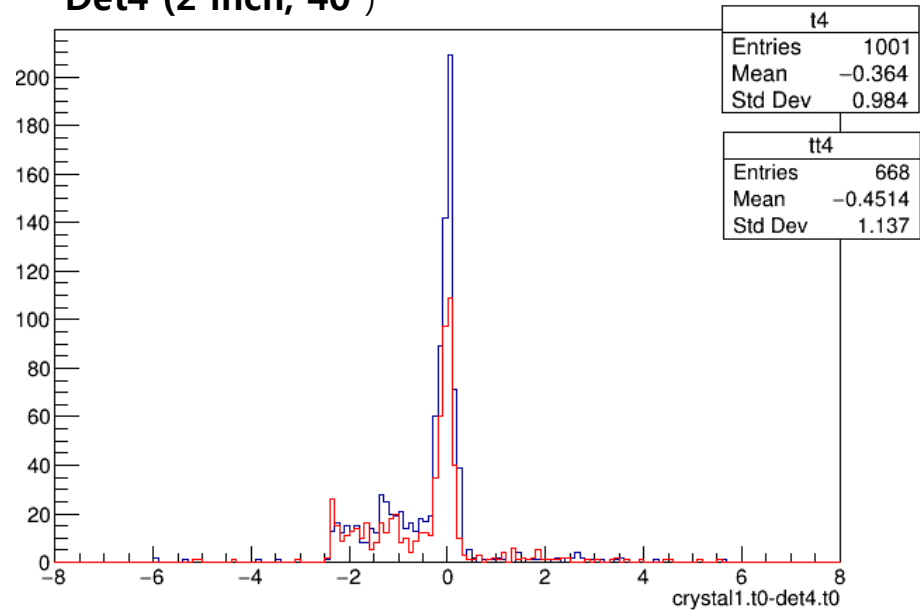
Det2 (1 inch, 15°)



Det3 (2 inch, 25°)

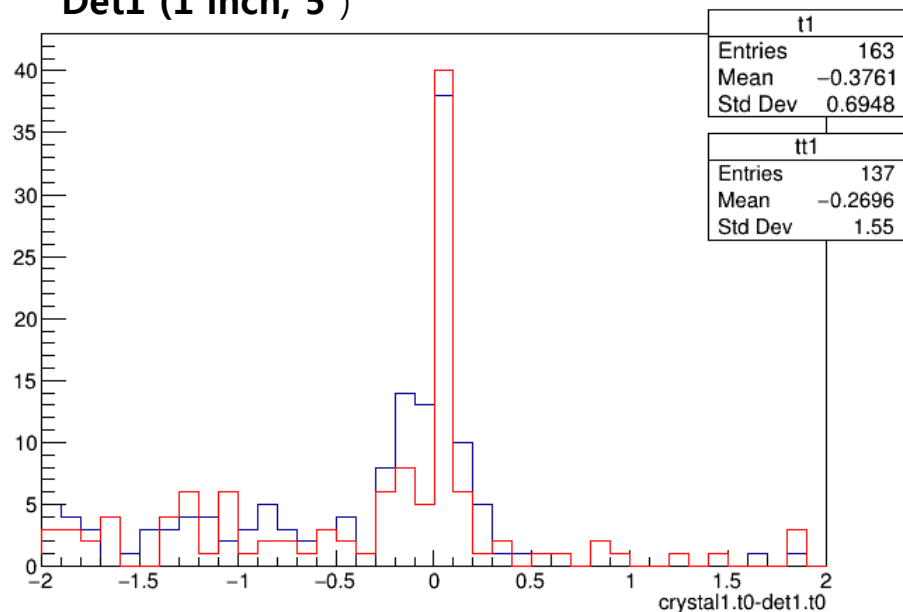


Det4 (2 inch, 40°)

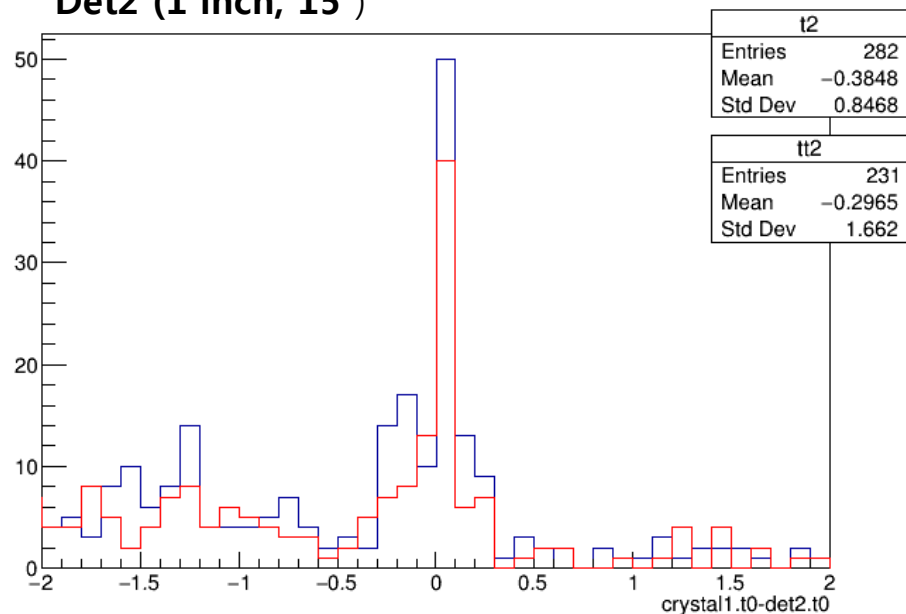


Time difference between NaI and LaBr3

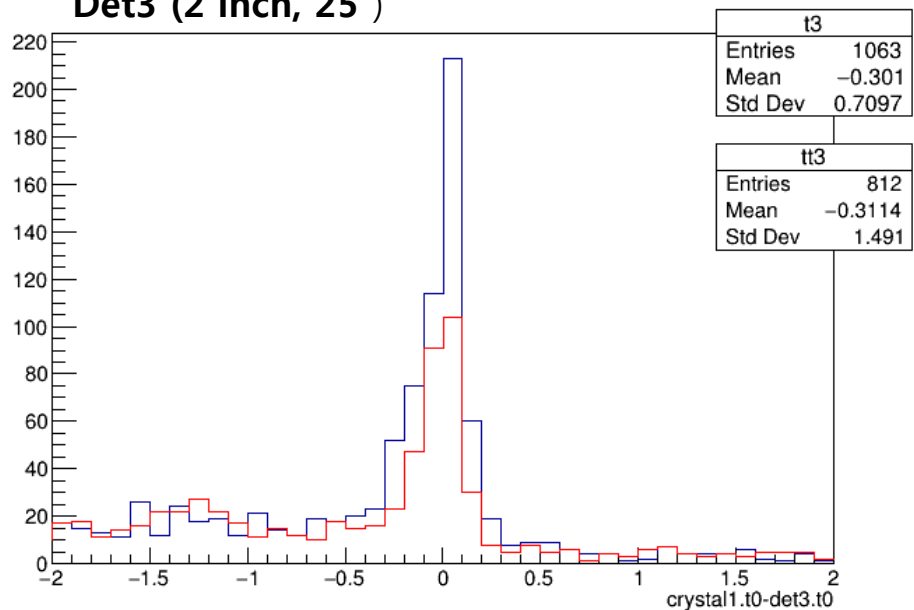
Det1 (1 inch, 5°)



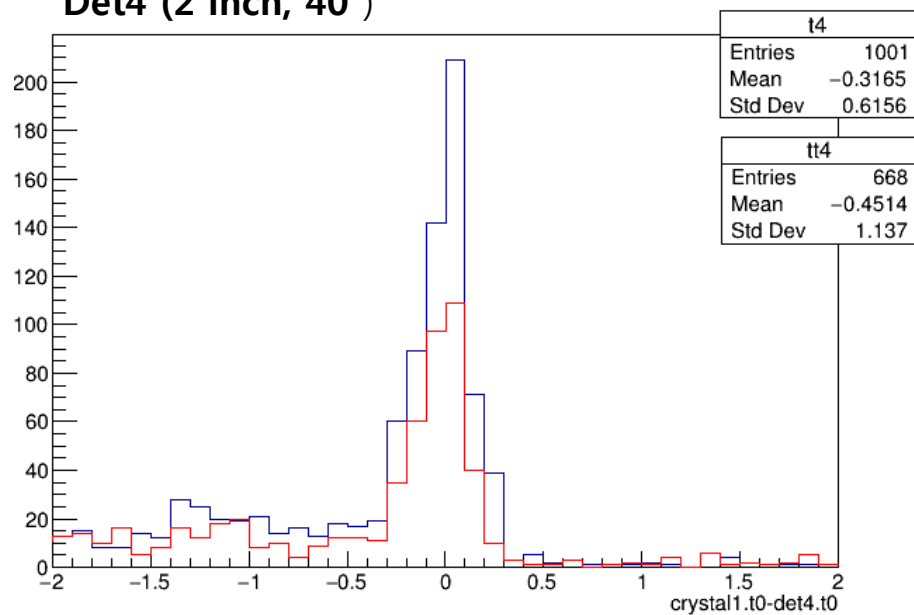
Det2 (1 inch, 15°)



Det3 (2 inch, 25°)

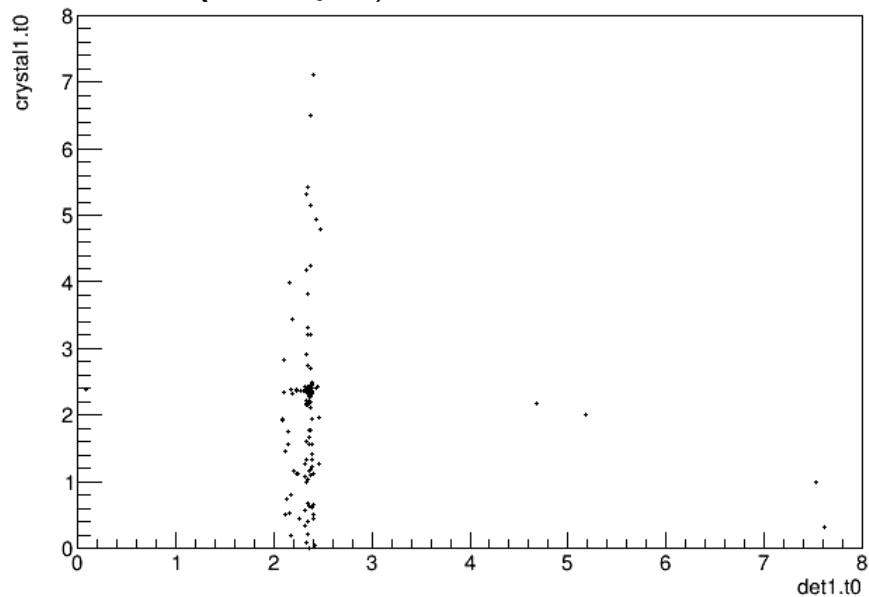


Det4 (2 inch, 40°)

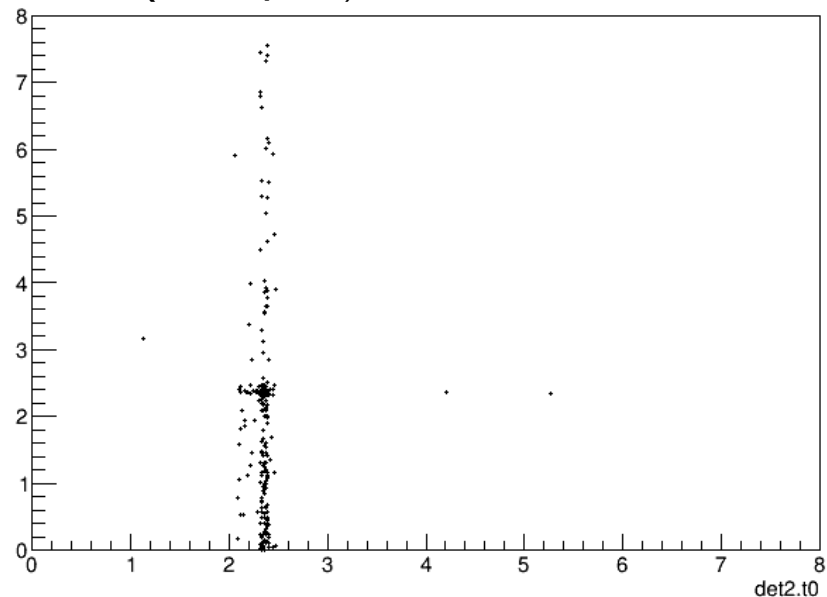


Time difference between NaI and LaBr3

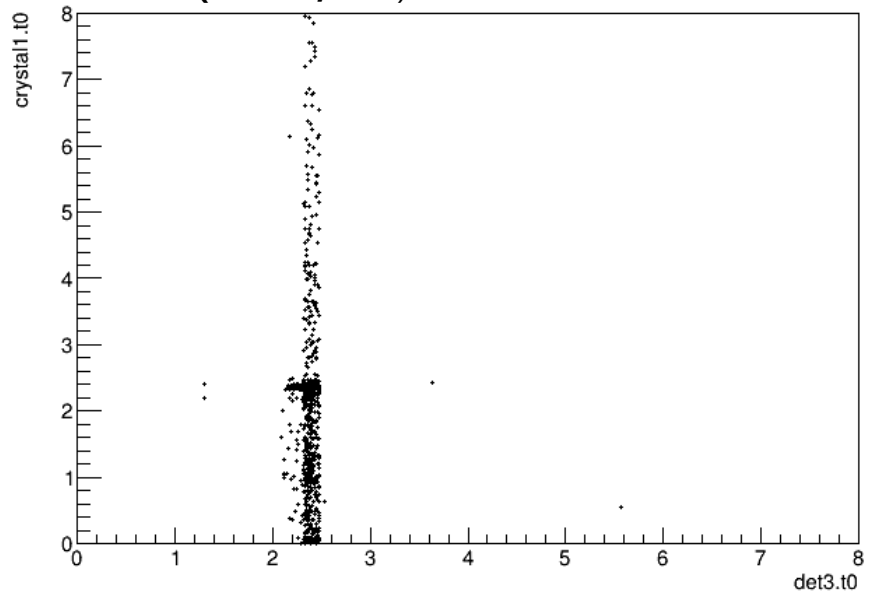
Det1 (1 inch, 5°)



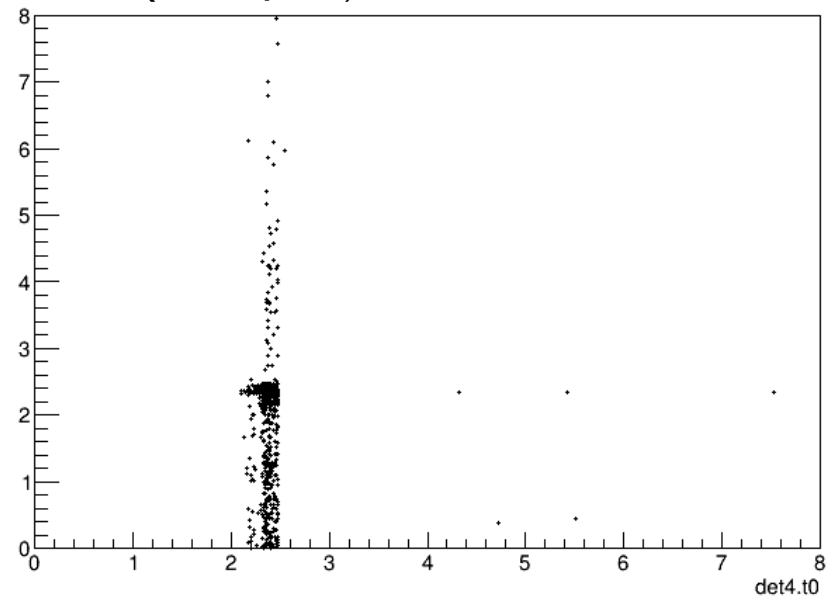
Det2 (1 inch, 15°)



Det3 (2 inch, 25°)

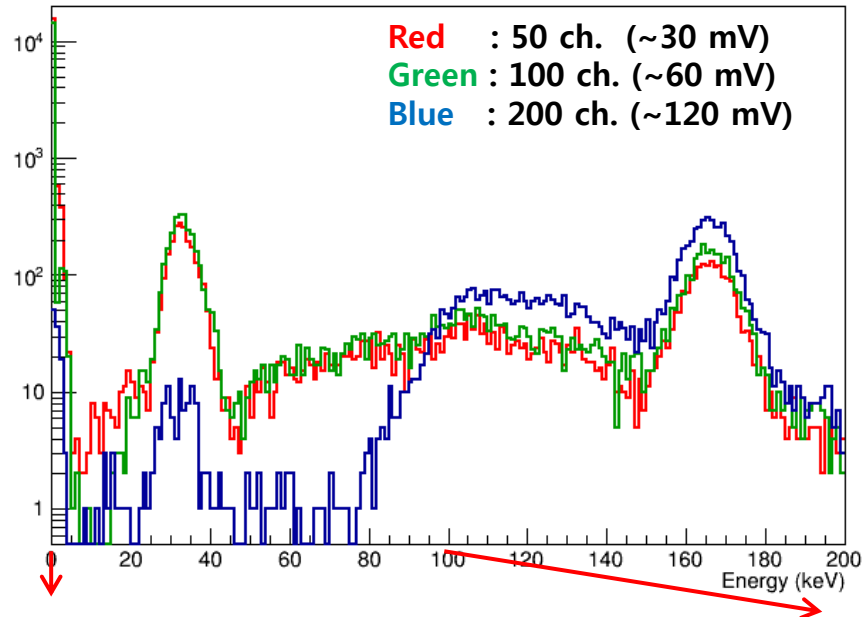


Det4 (2 inch, 40°)



DAQ threshold

Det3 (2 inch, 25°)



Event rate

50 ch : 2601.6 Hz

100 ch : 1954.1 Hz

200 ch : 1969.6 Hz

