

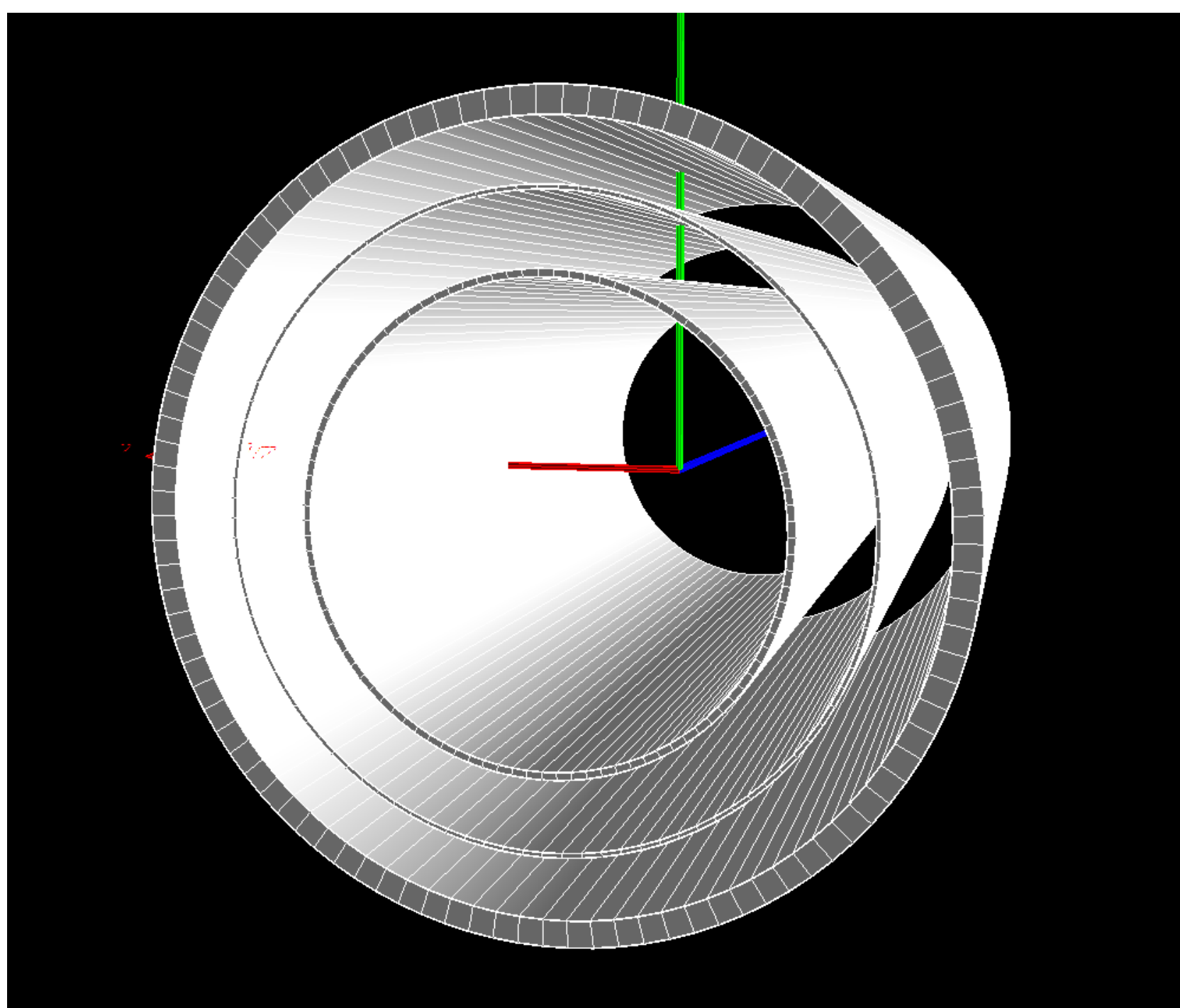
3 layer design

- inner layer :
 - YAG variable X0
 - (0.1 to 1 X0)
- middle layer :
 - LaBr variable X0
 - (0.1 to 1 X0)
- outer layer :
 - BGO 3 X0
- each detector shrouded by 1mm aluminium

YAG X0 = 35.4mm

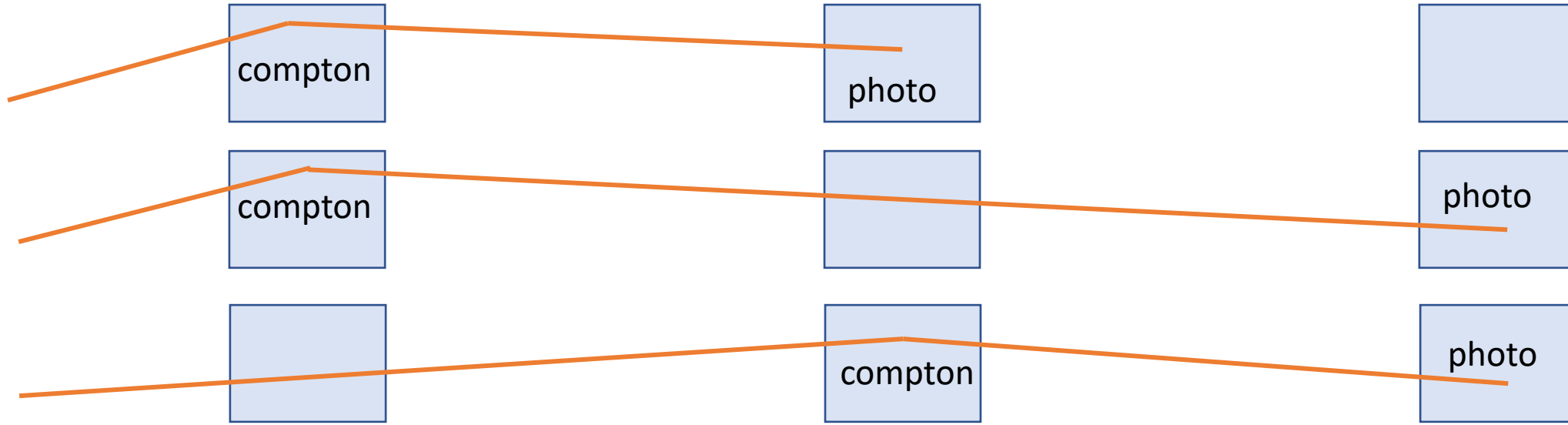
LaBr X0 = 19.7mm

BGO X0 = 11.2mm

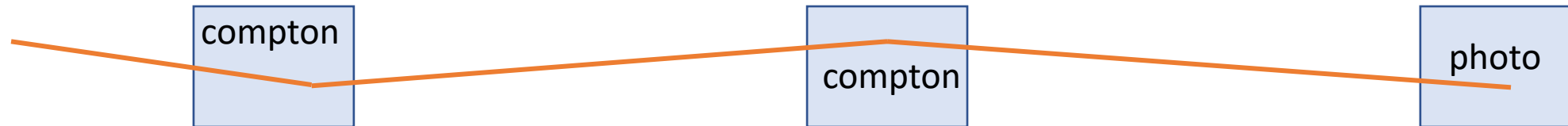


good events

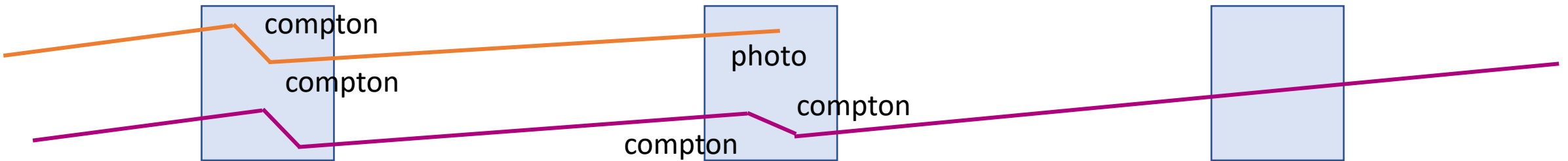
2 interactions



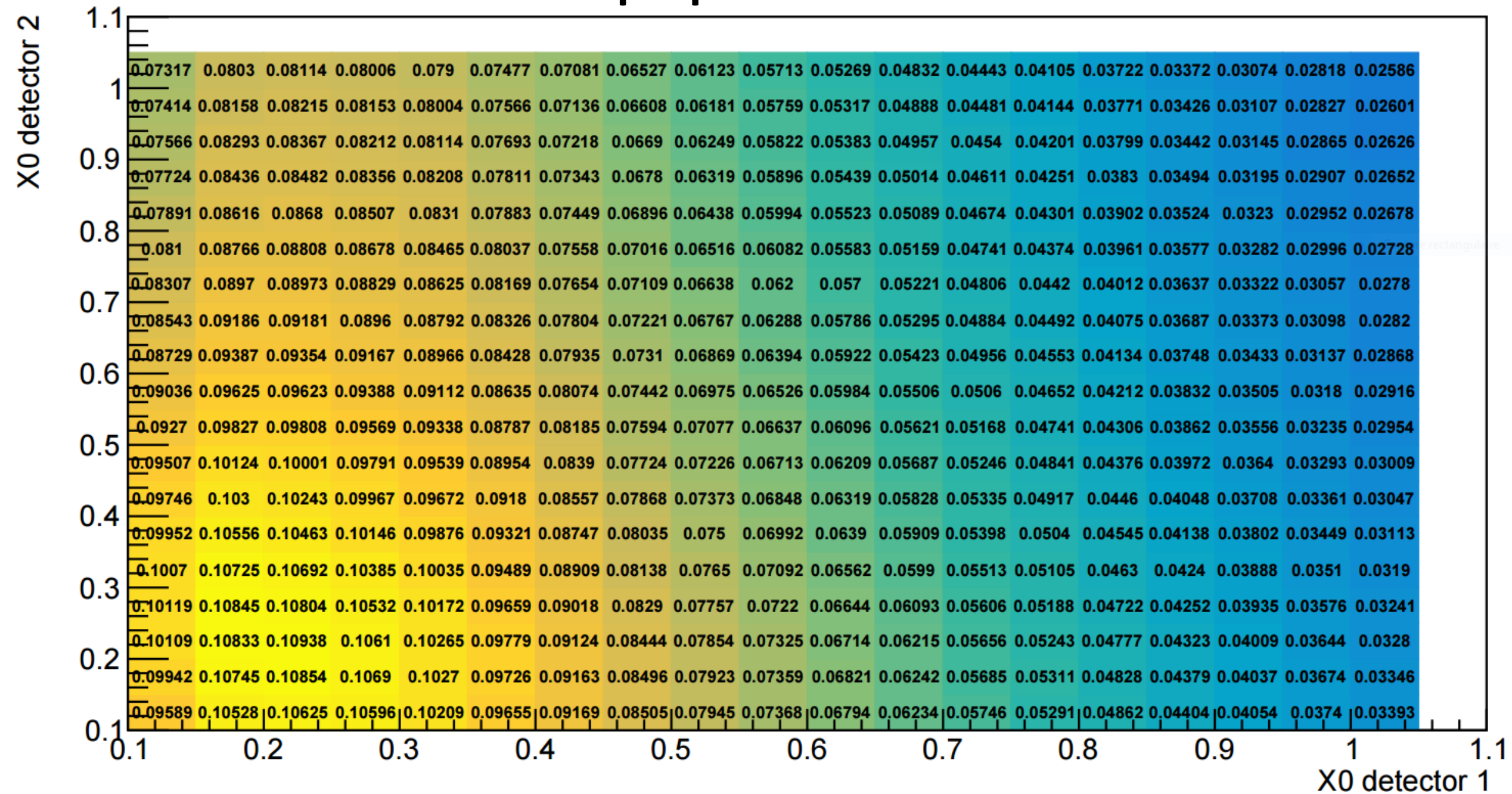
3 interactions



bad events

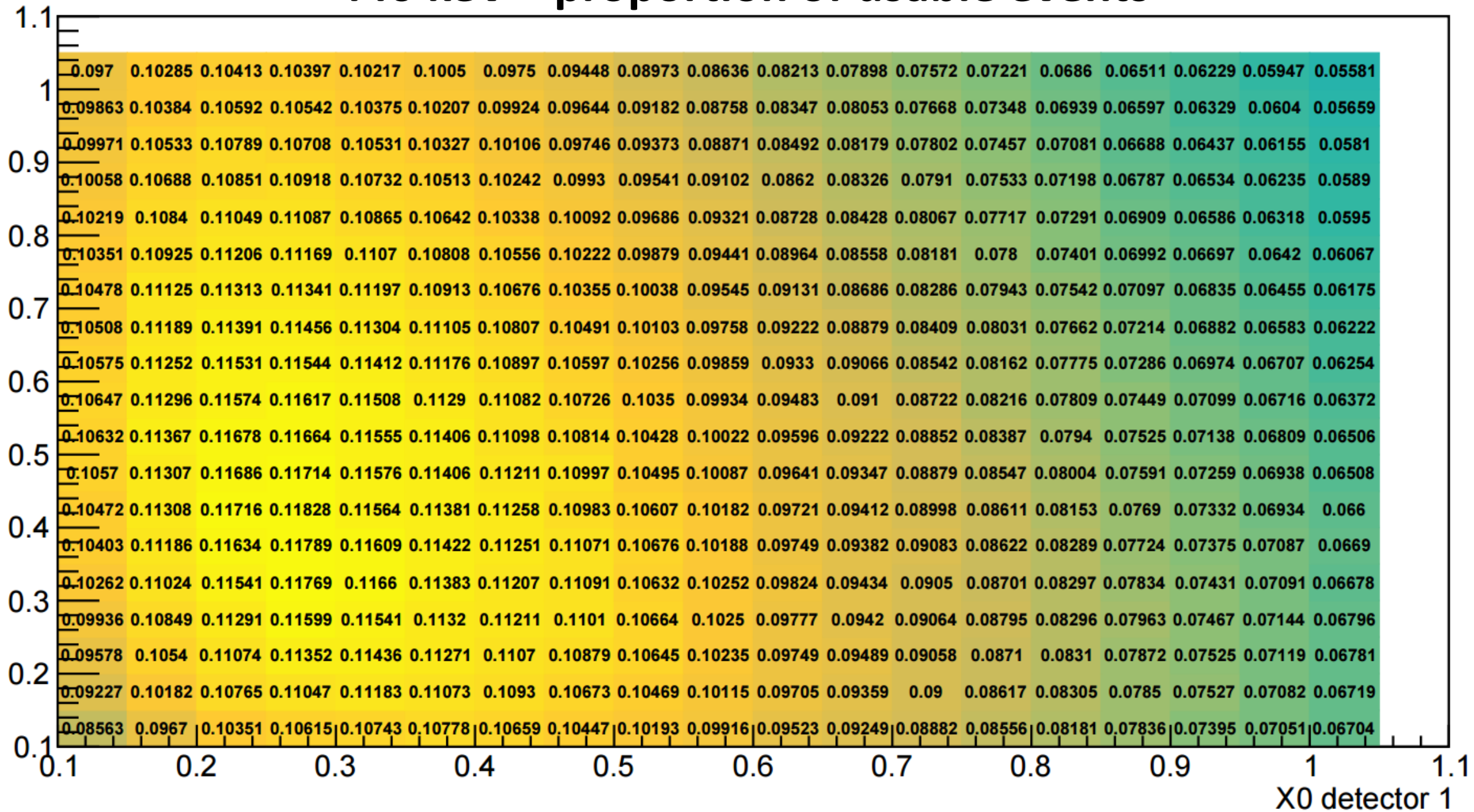


218 keV proportion of usable events



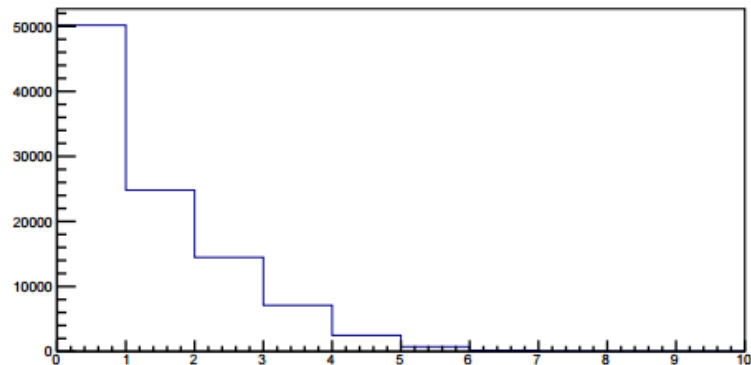
440 keV proportion of usable events

X0 detector 2

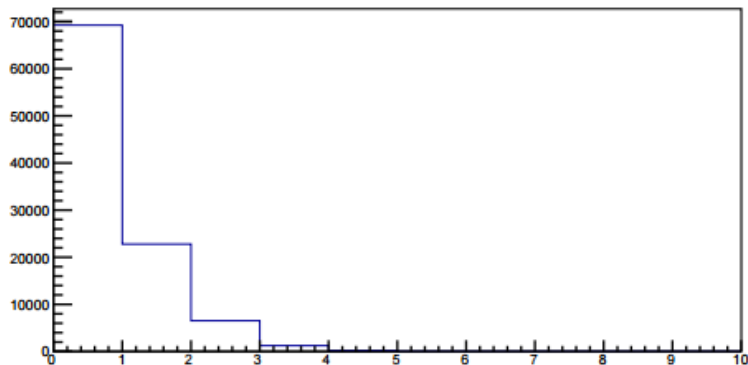


218 keV inner and middle detector 0,25X0 thickness

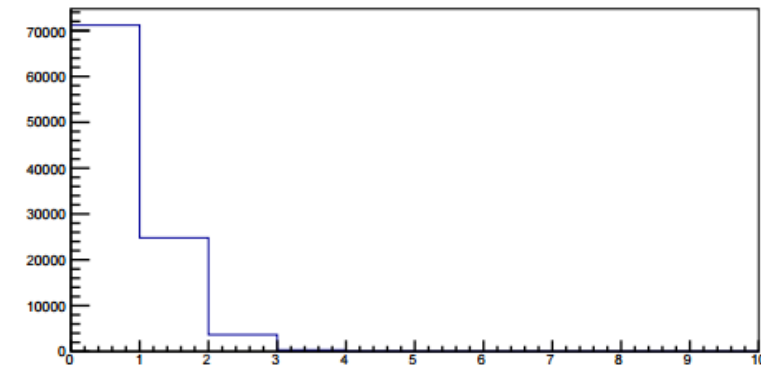
n Interactions detector 0



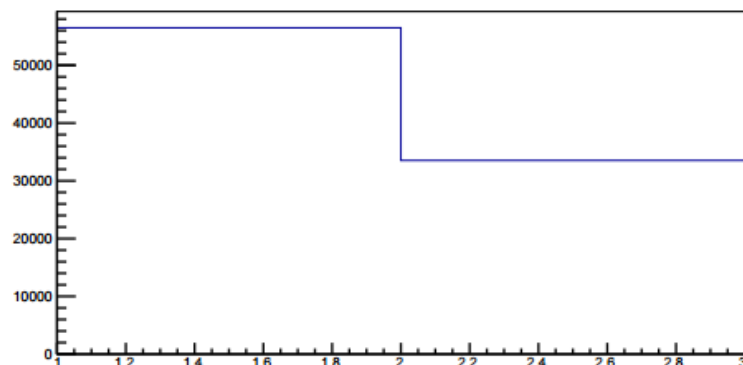
n Interactions detector 1



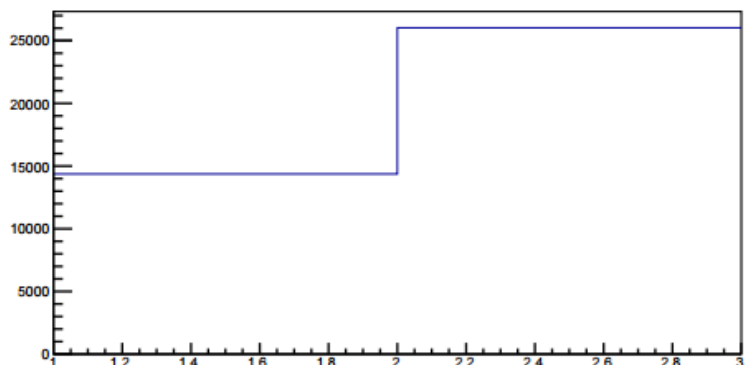
n Interactions detector 2



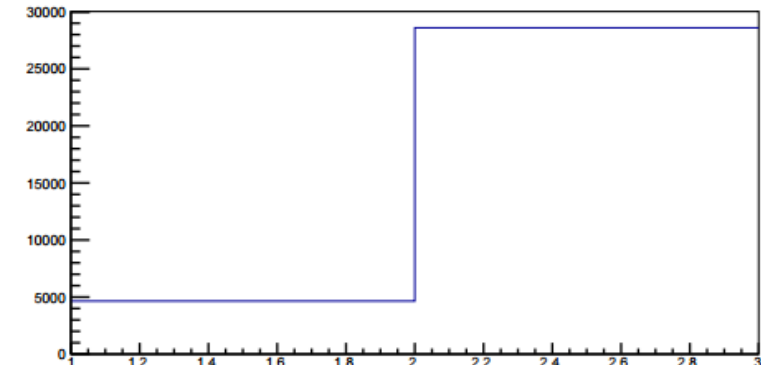
interaction type detector 0



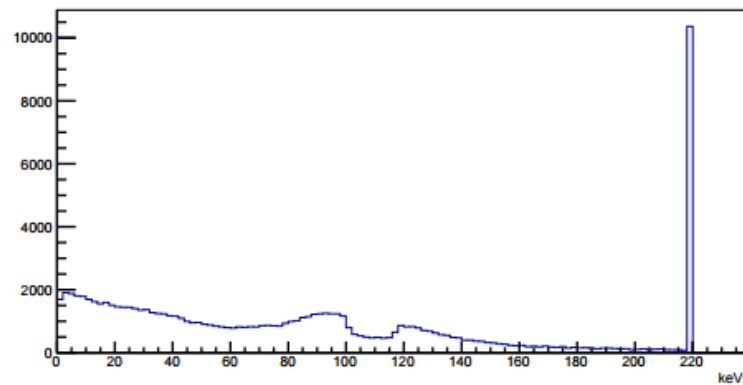
interaction type detector 1



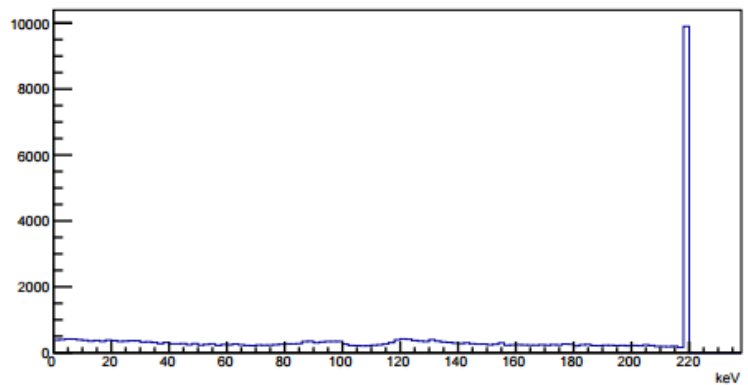
interaction type detector 2



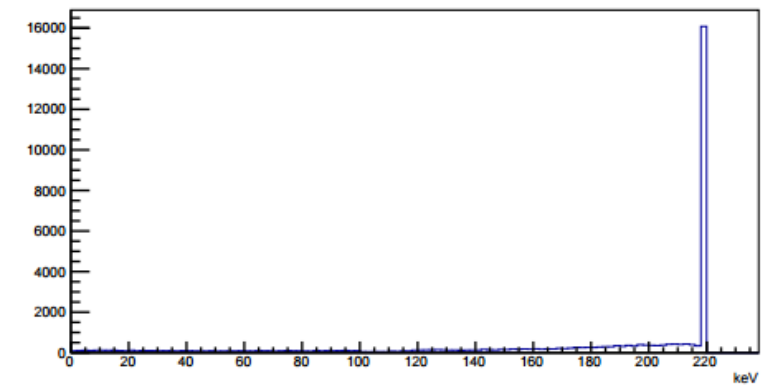
energy detector 0



energy detector 1

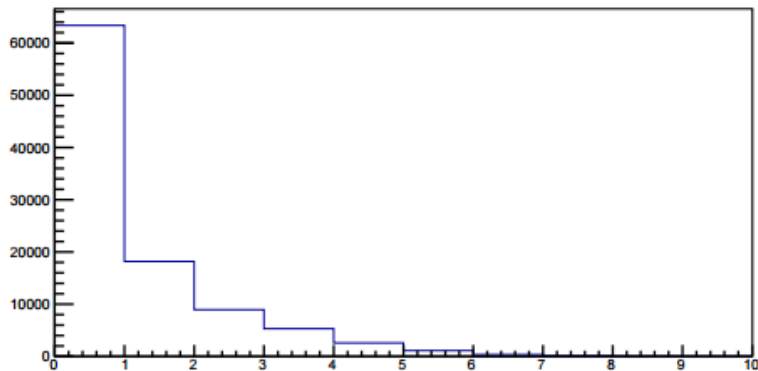


energy detector 2

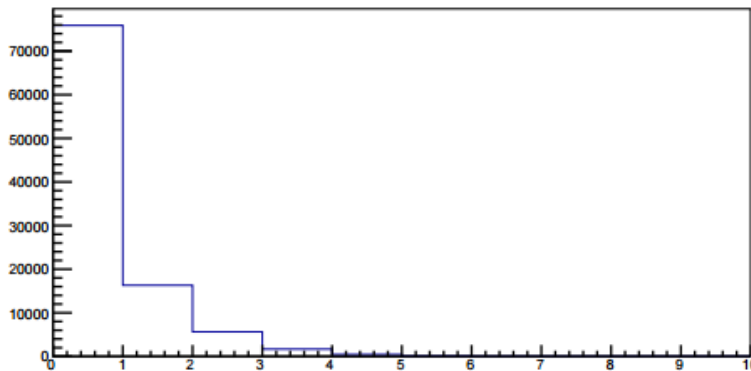


440 keV inner and middle detector 0,25X0 thickness

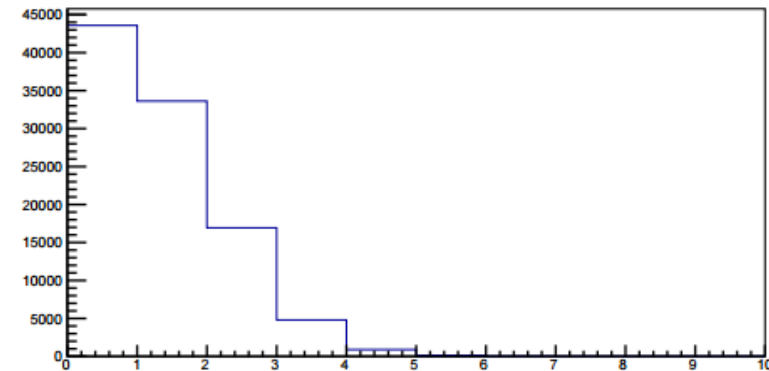
n Interactions detector 0



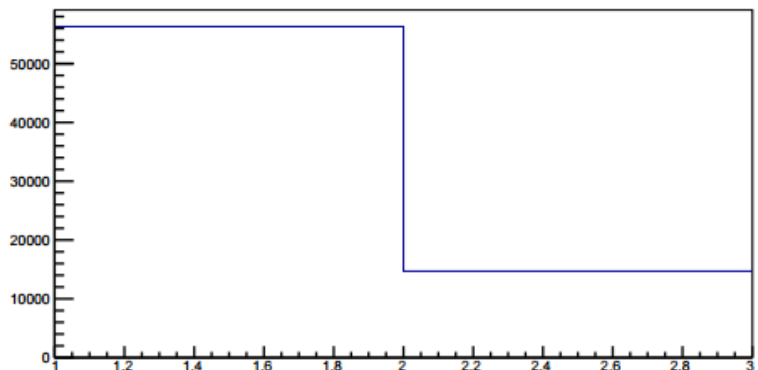
n Interactions detector 1



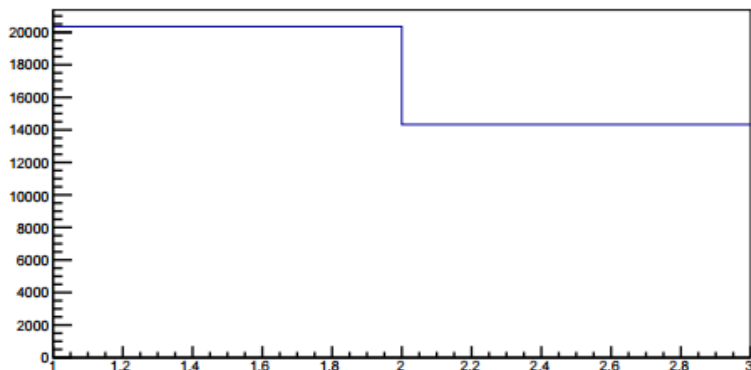
n Interactions detector 2



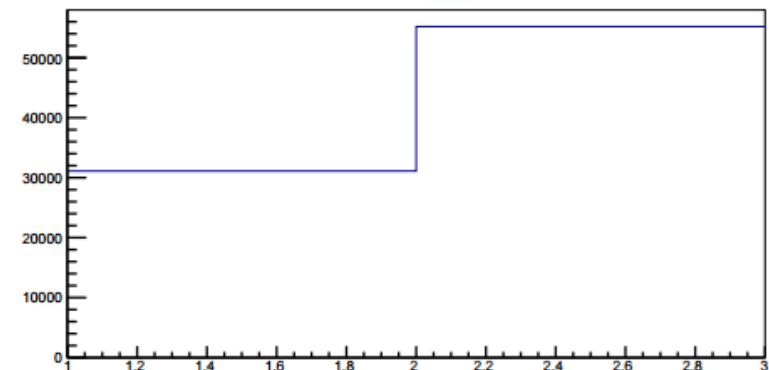
interaction type detector 0



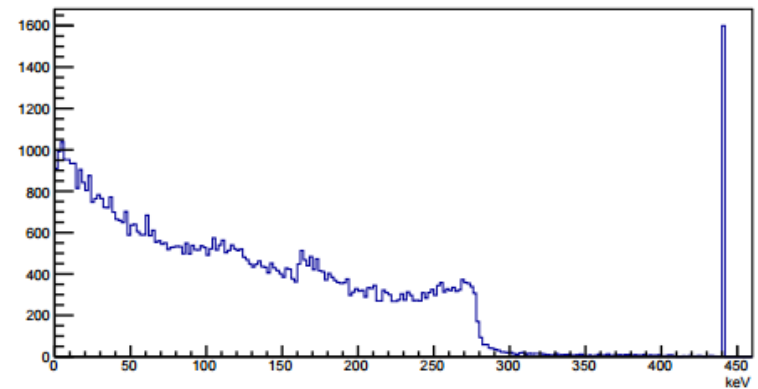
interaction type detector 1



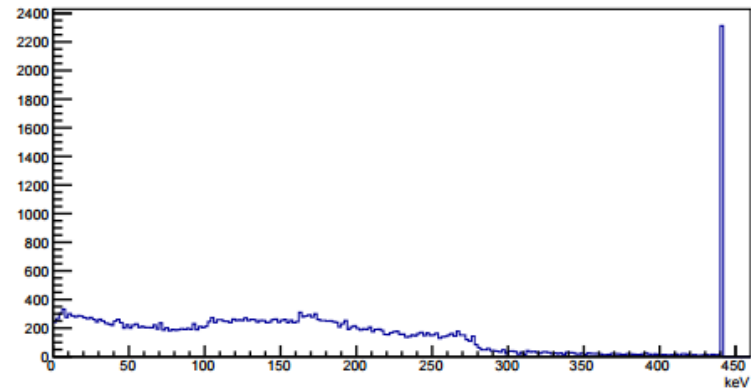
interaction type detector 2 une rectangulaire



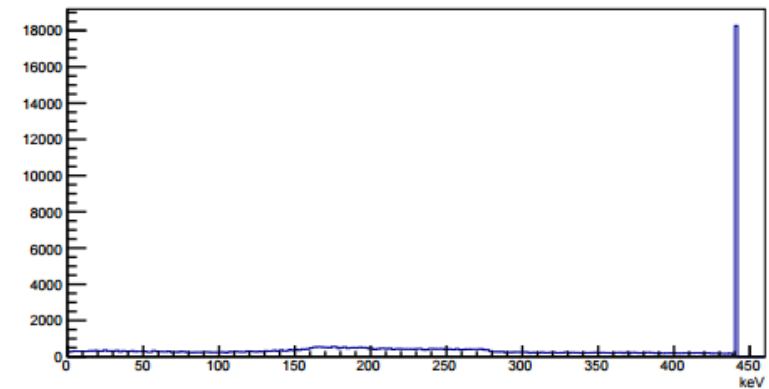
energy detector 0



energy detector 1

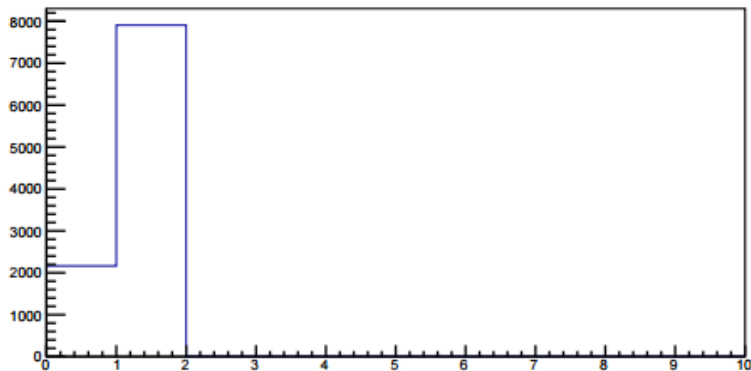


energy detector 2

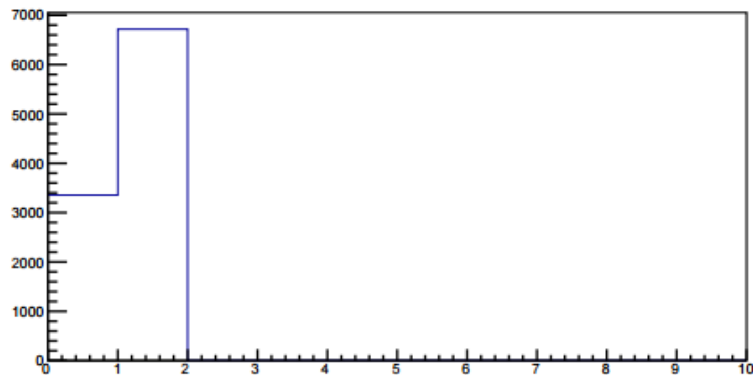


218 keV – only 2 interactions events (0,25X0)

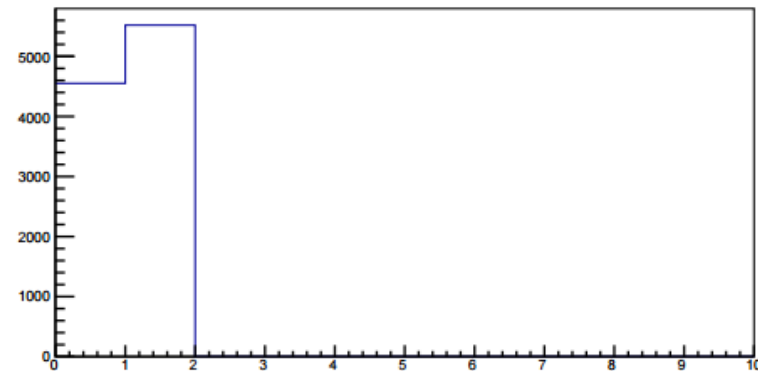
n Interactions detector 0



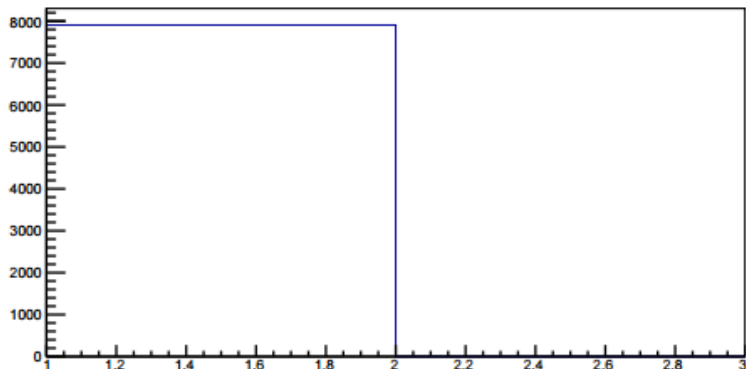
n Interactions detector 1



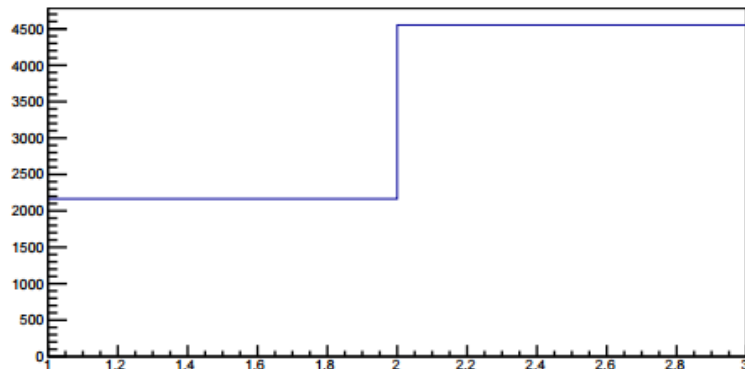
n Interactions detector 2



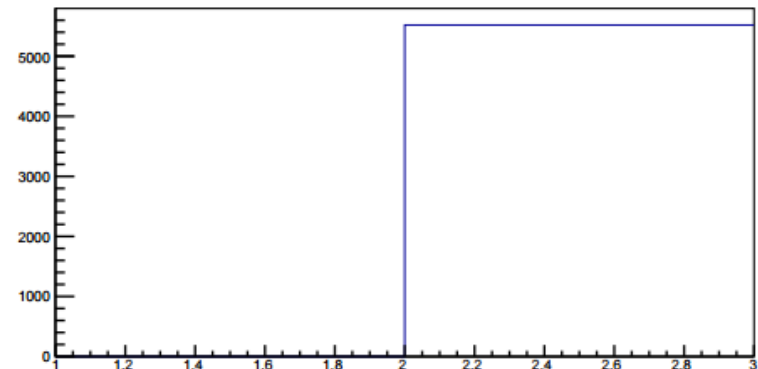
interaction type detector 0



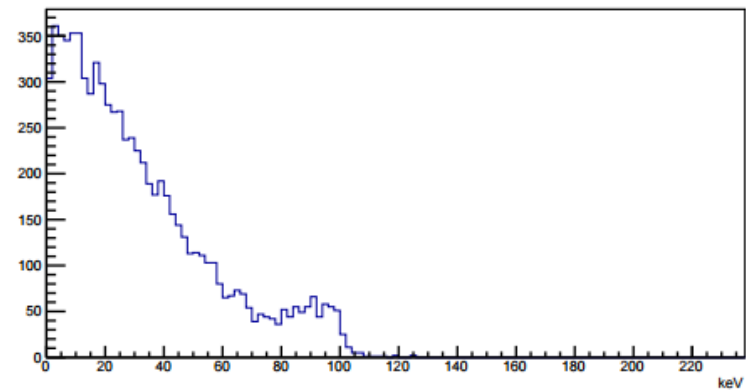
interaction type detector 1



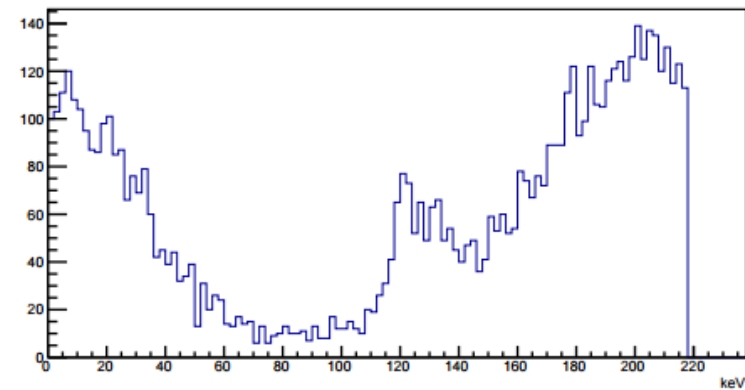
interaction type detector 2



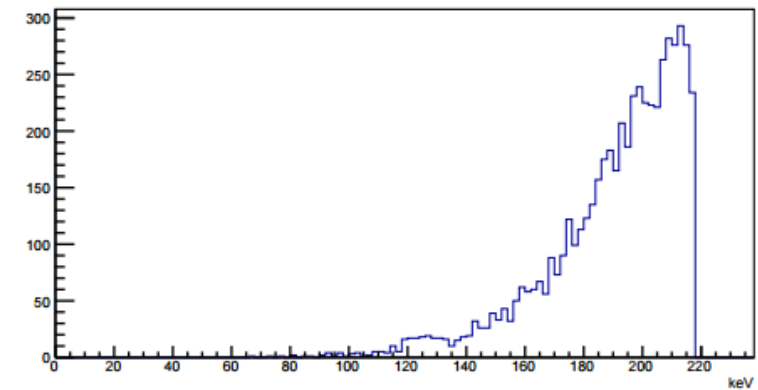
energy detector 0



energy detector 1

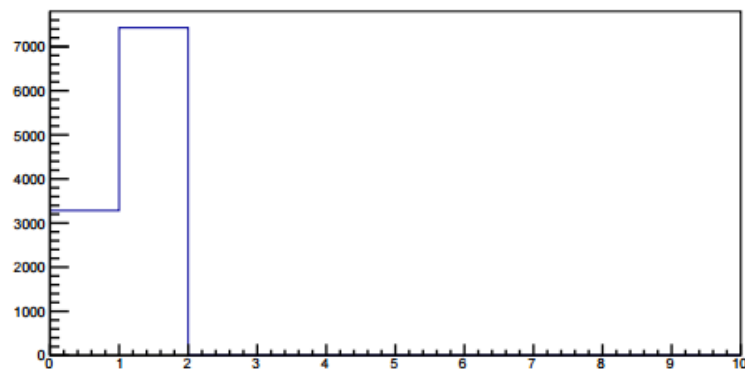


energy detector 2

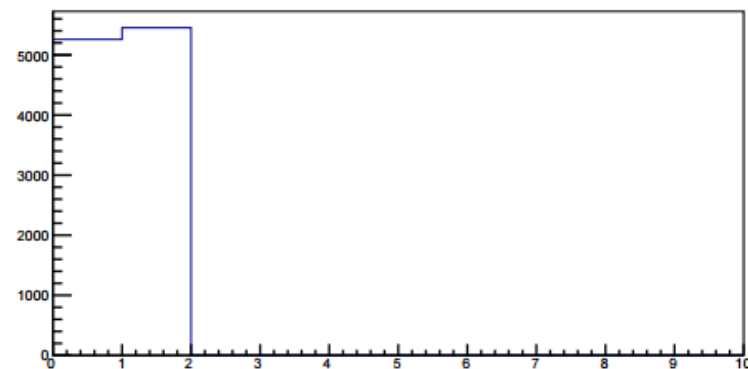


440 keV – only 2 interactions events (0,25X0)

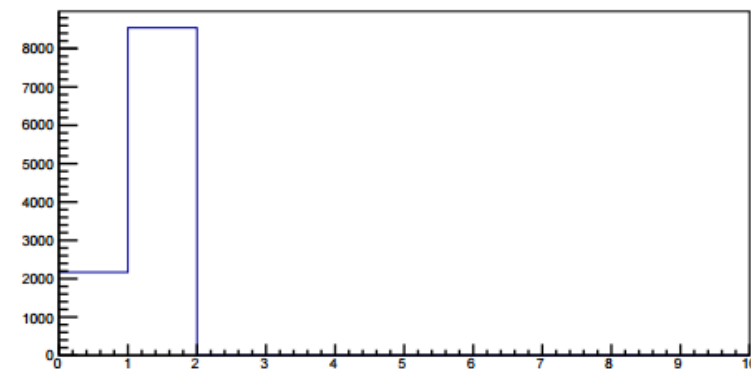
n Interactions detector 0



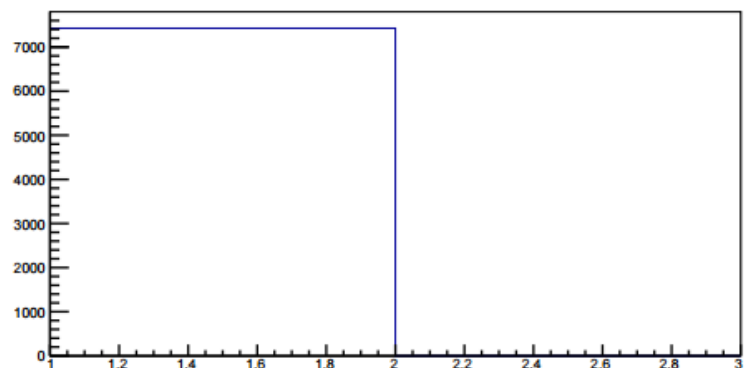
n Interactions detector 1



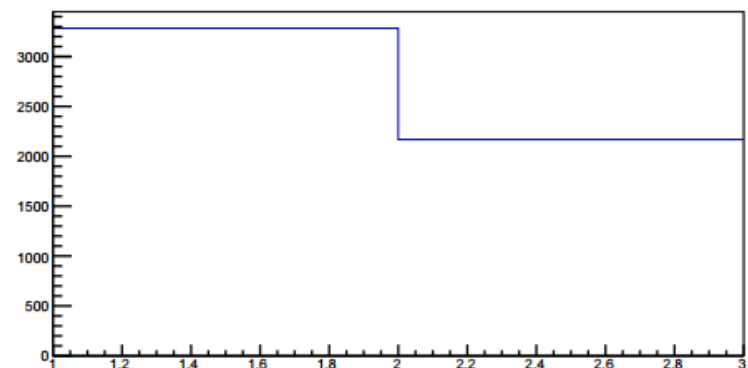
n Interactions detector 2



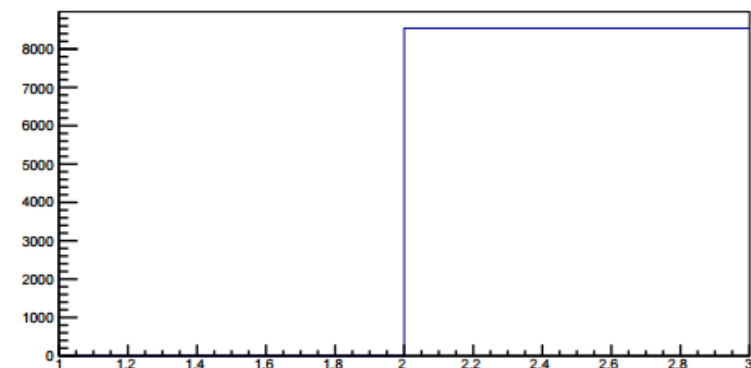
interaction type detector 0



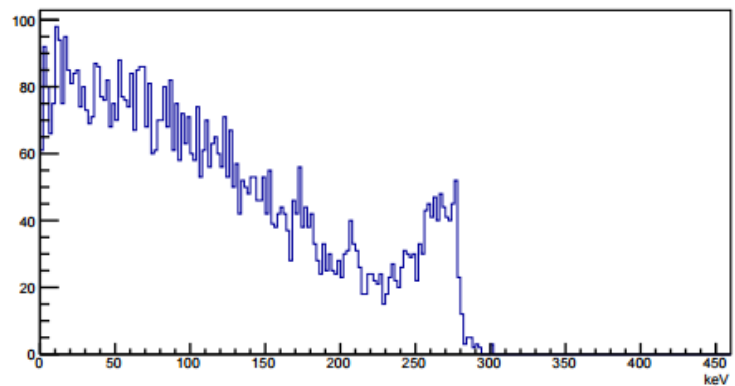
interaction type detector 1



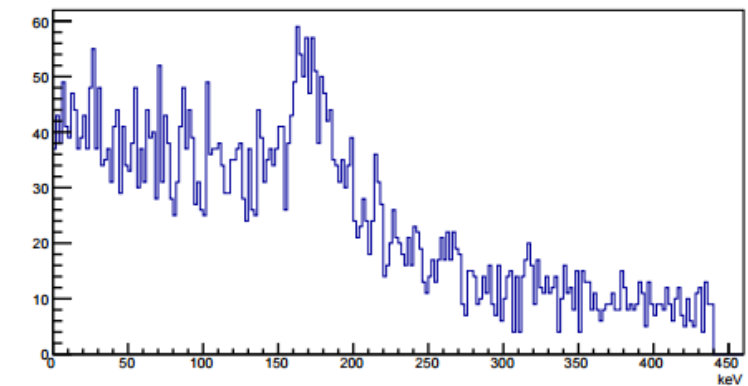
interaction type detector 2



energy detector 0



energy detector 1



energy detector 2

