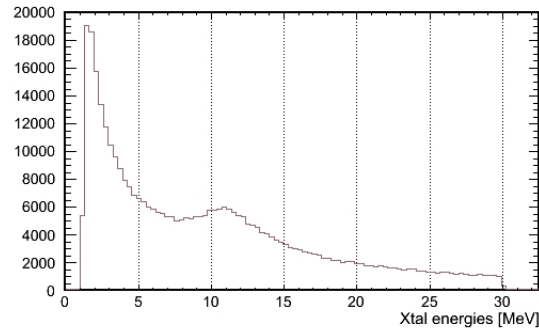
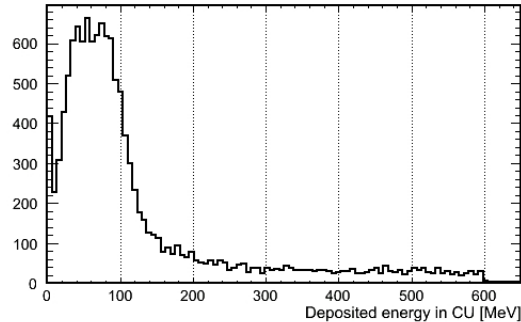


## *MIP peak in proton runs*



94k events out of 511 from run 1371

Top: deposited energy in CU per event

Expected  $90 \text{ MeV} / \cos(30^\circ) = 104 \text{ MeV}$  but we have  $< 100 \text{ MeV}$ .

Bottom: deposited energy per Xtal per event

Expected  $11.2 \text{ MeV} / \cos(30^\circ) = 13 \text{ MeV}$  but we have 11 MeV

According to Sacha, the effect can be due to

- high rate of particles depositing energy in the same crystal.  
Problem for the BT, but not for flight.
- high readout rate. Problem in BT AND flight!

Have to find out what's going on.

# First look at GEM $\Delta t$ dependency, assuming 50nsec/tick

