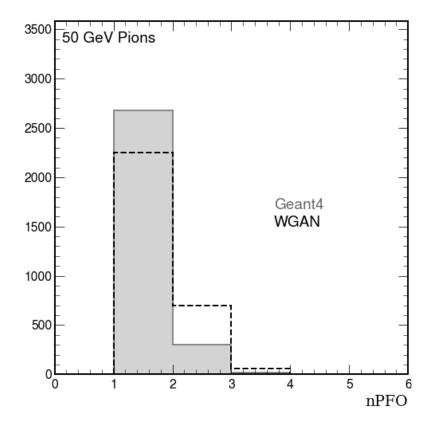
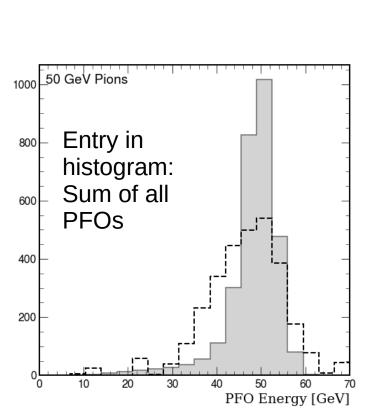
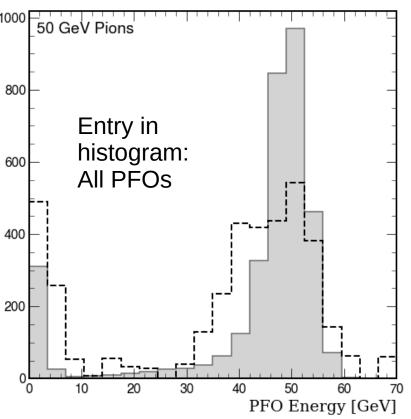
#### **Summary of 25x25 Pion showers** 0.50 $10^{3}$ full spectrum 0.14 full spectrum Relative width $10^{2}$ 0.12 energy [MeV] 0.10 6 S 0.25 10 80.0 ë. $10^{0}$ 0.06 0.042000 $10^{-1}$ — GEANT 4 0.02 - WGAN-BestResCor $10^{-2}$ 0.00 1500 15 10 20 25 15 20 25 30 35 40 45 radius [pixels] center of gravity Z [layer] $\mu_{90}[{\rm MeV}]$ 0.20 1000 0.20 20 GeV 50 GeV 0.15 0.15 500 ற் 0.10 ë 0.10 80 GeV 50 GeV 0.1 $\mu_{90}-\mu_{90}^{\mathrm{G4}}$ 80 GeV 0.05 0.05 -0.10.00 0.00 20 60 80 100 500 1000 1500 2000 500 pion energy [GeV] energy sum [MeV] number of hits

## Reconstruction





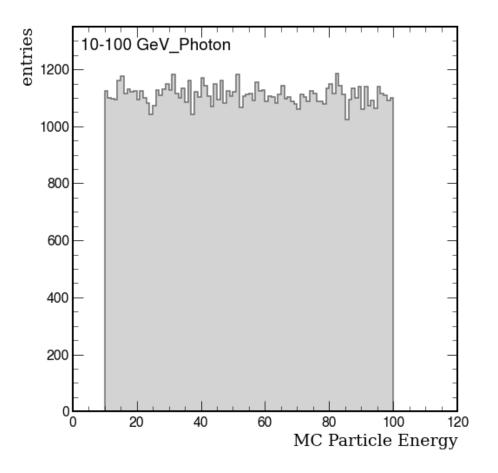


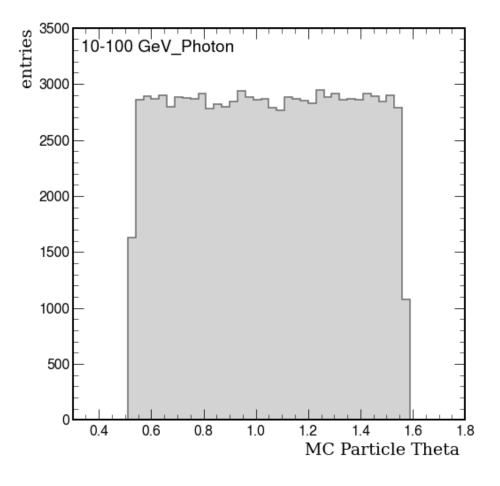
## **Data Generation for Peter**

Now both energy and angle are uniformly distributed

- A bit technical manipulation was needed
  - First, LCIO with MC particle collection only data (GEN)
  - > Then, run ddsim in iLCsoft with GEN information → SIM

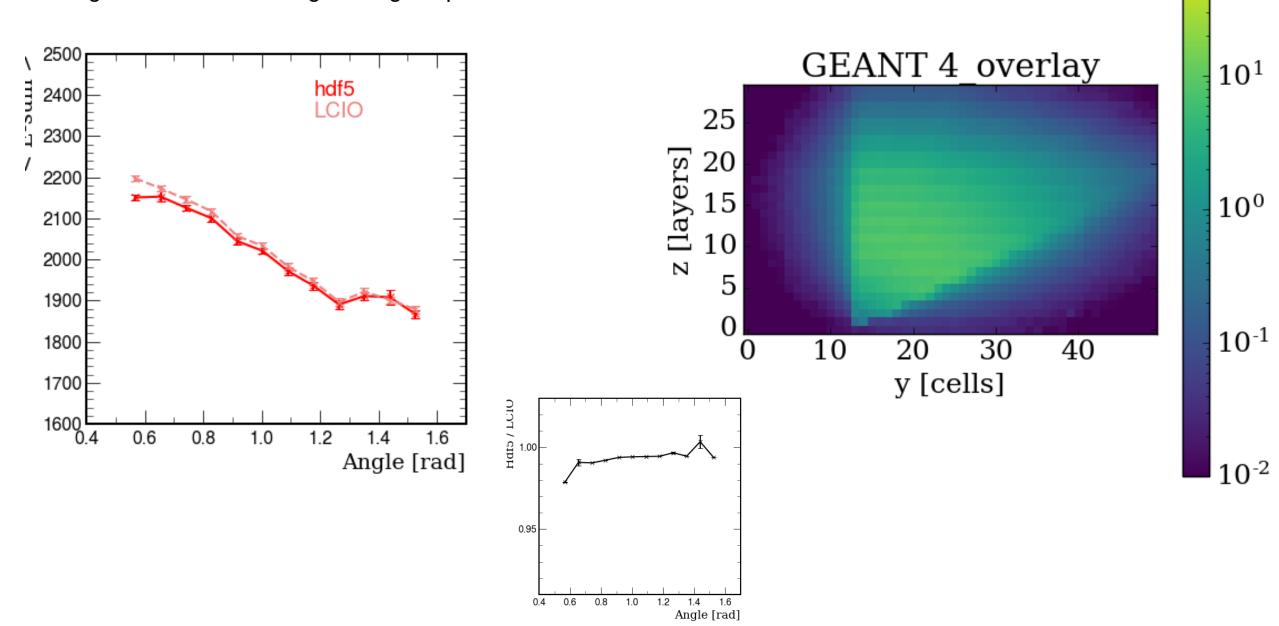
### **Control Plots**





## **Data Generation for Peter**

Leaking is around %2 for high energetic photons, for **30x30x50 box** 



 $10^{2}$ 

# Thank you