

Barrel Calorimeter SciGlass implementation

Nathaly Santiesteban

06/08/2021

Current work

- Blocks geometry implemented by using the SPACAL version of sPHENIX.
- Using the simple version to evaluate the resolution and performance of the SciGlass.

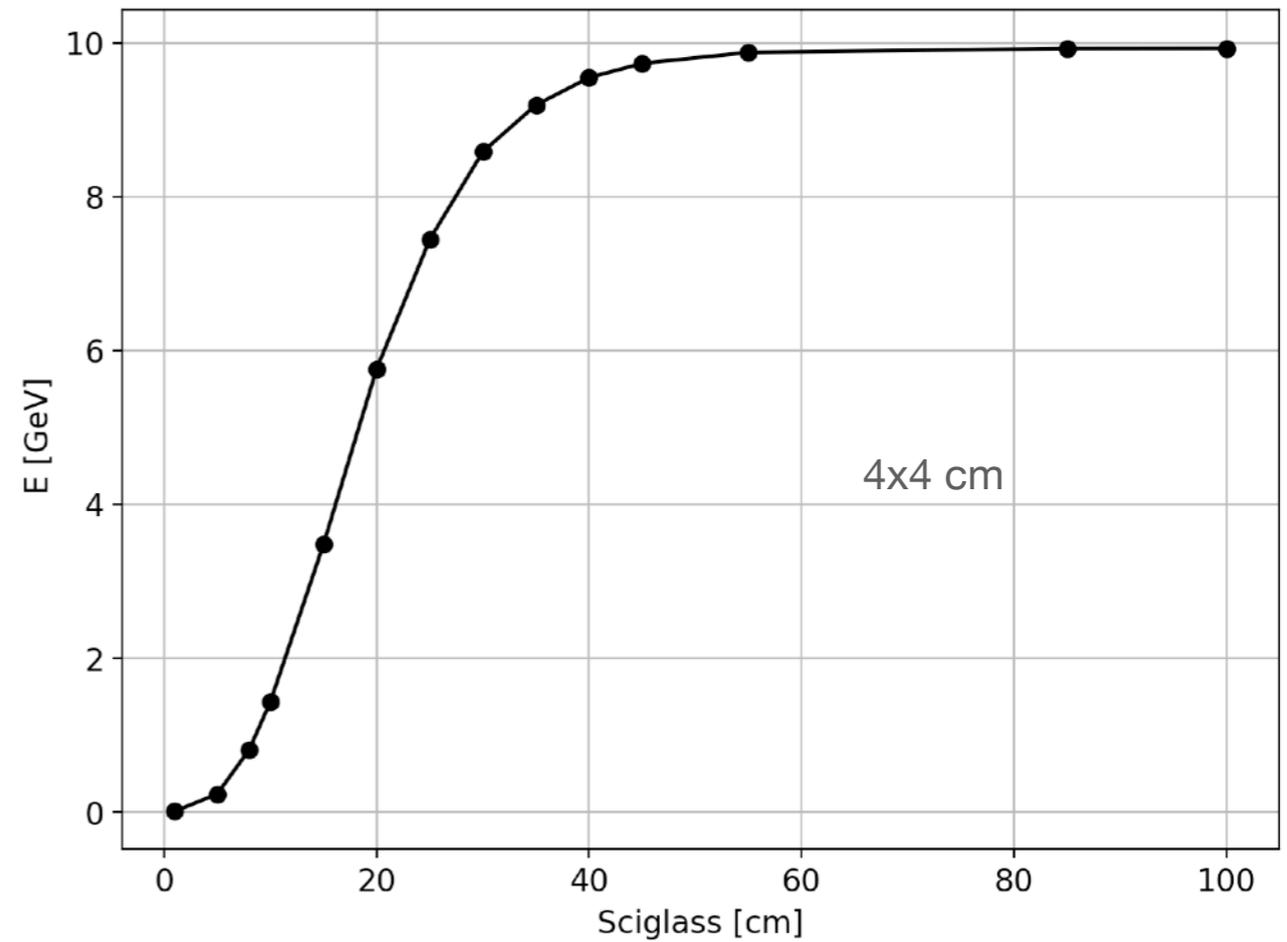
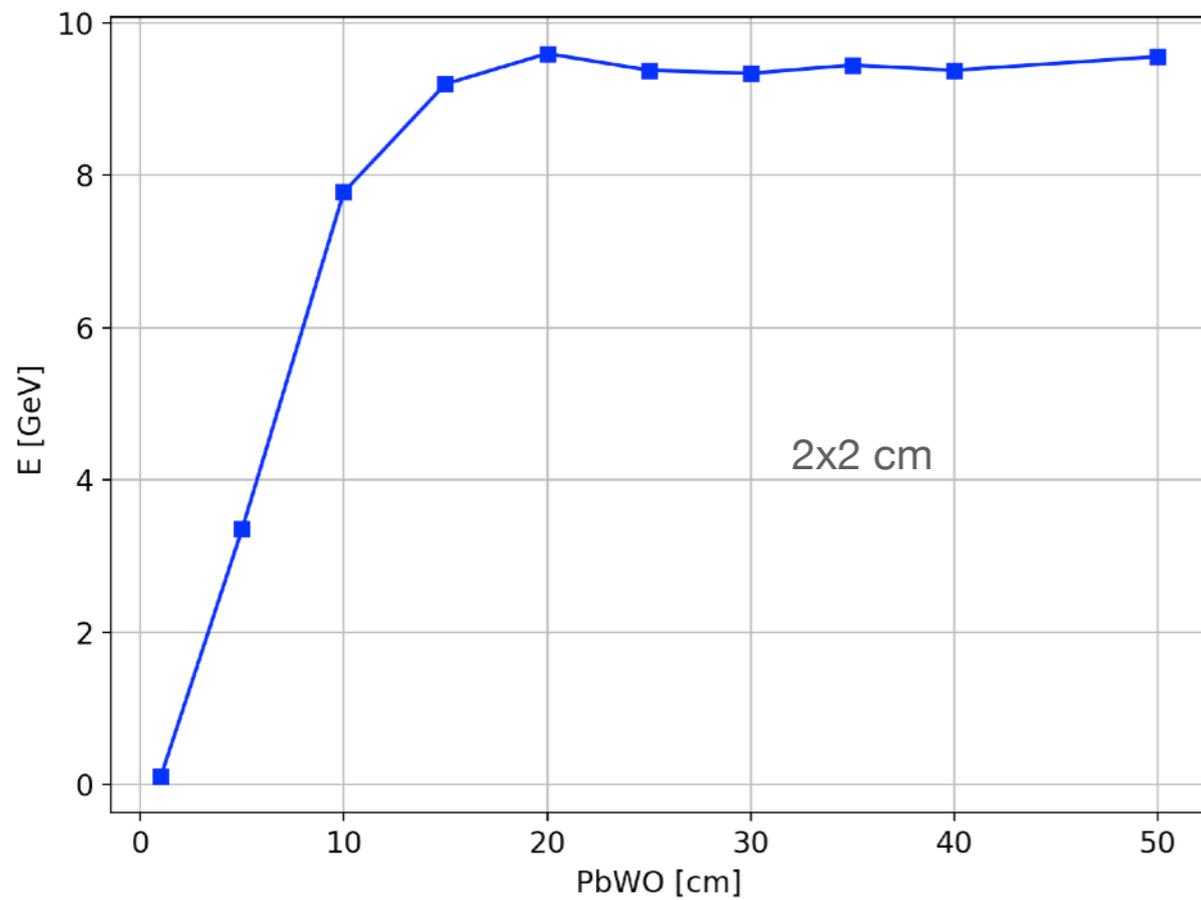
Generating:

Simple Sample

Electrons at 10 GeV

Eta Range (-0.2,0.2)

All other detectors and magnet are off



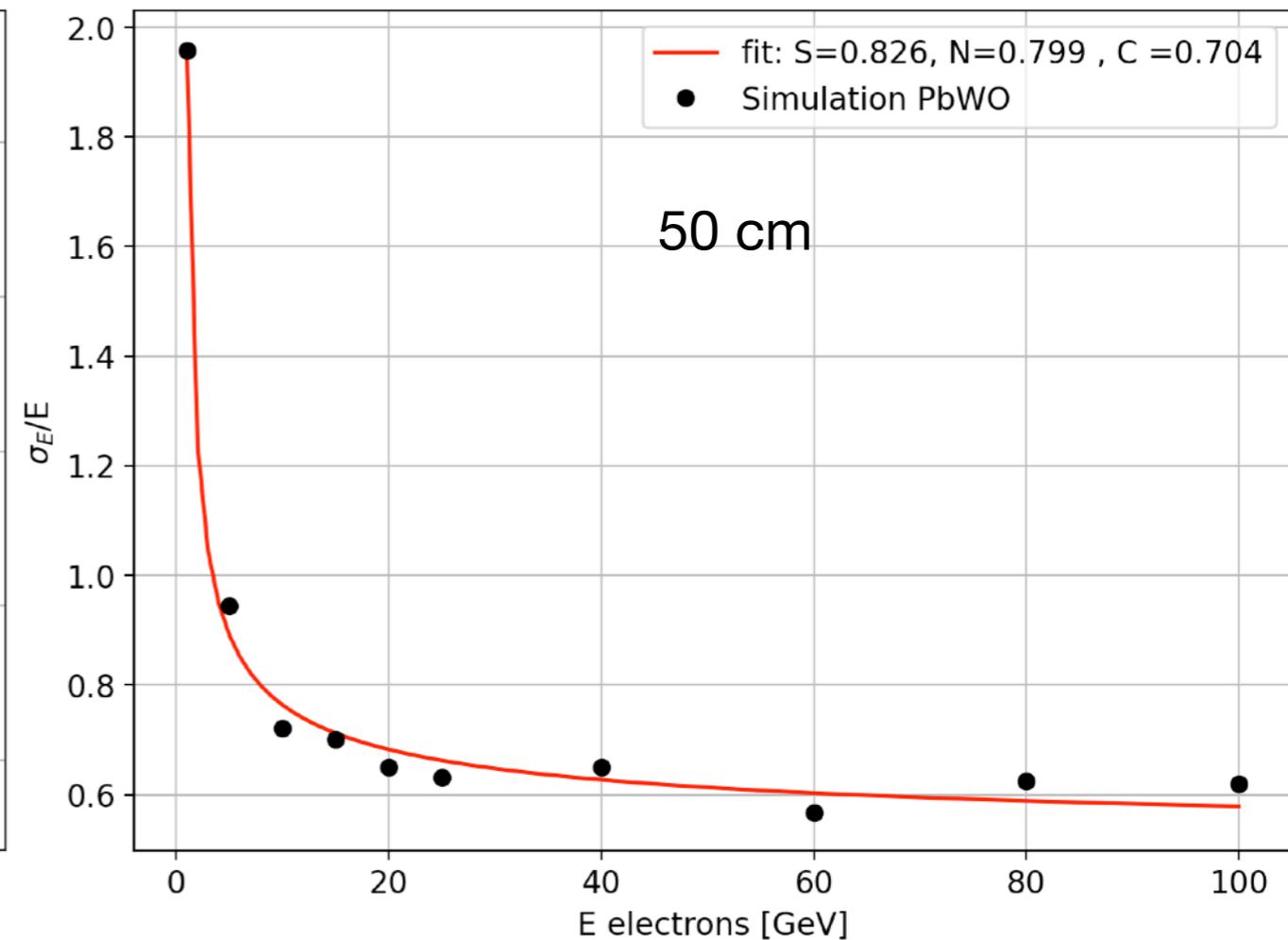
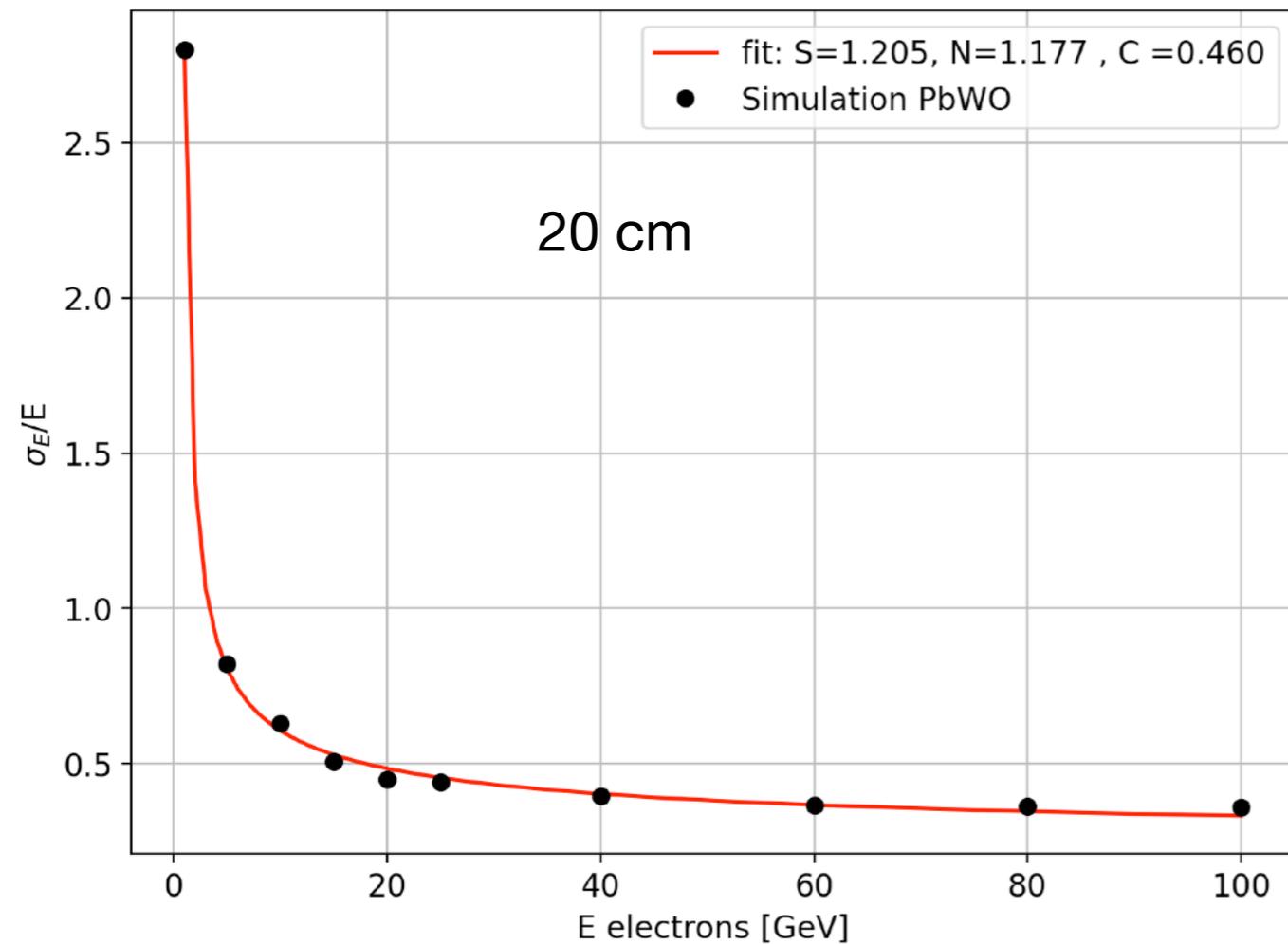
Generating:

Simple Sample

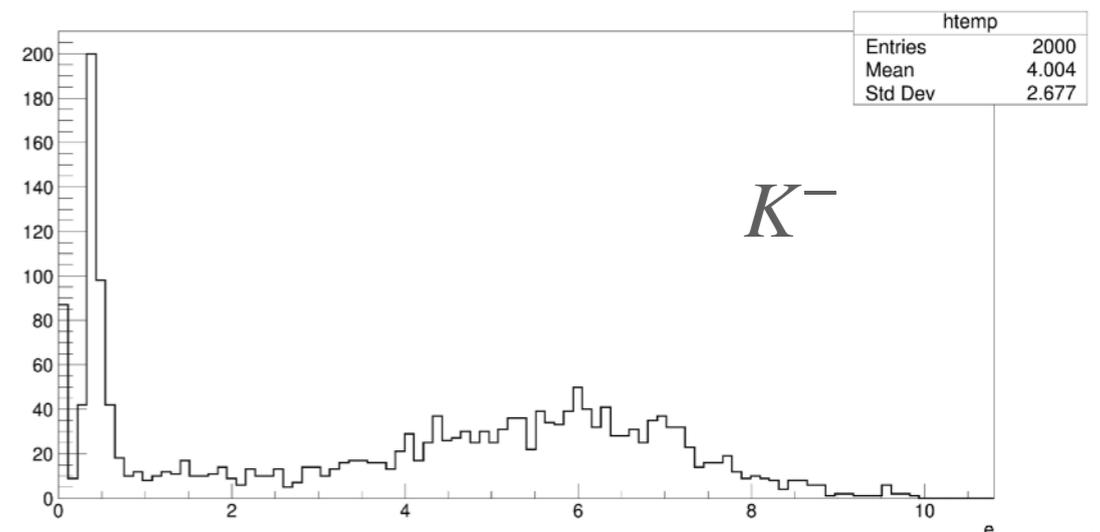
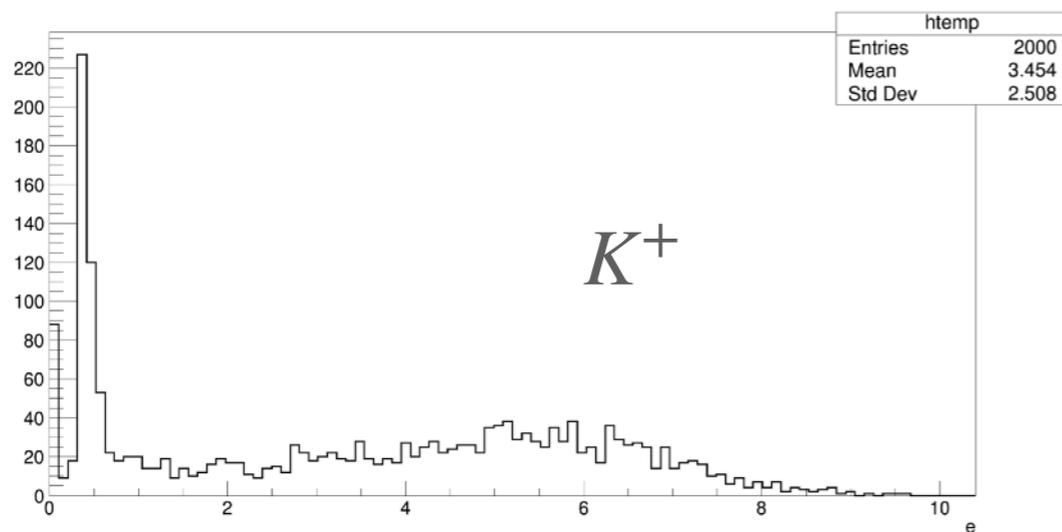
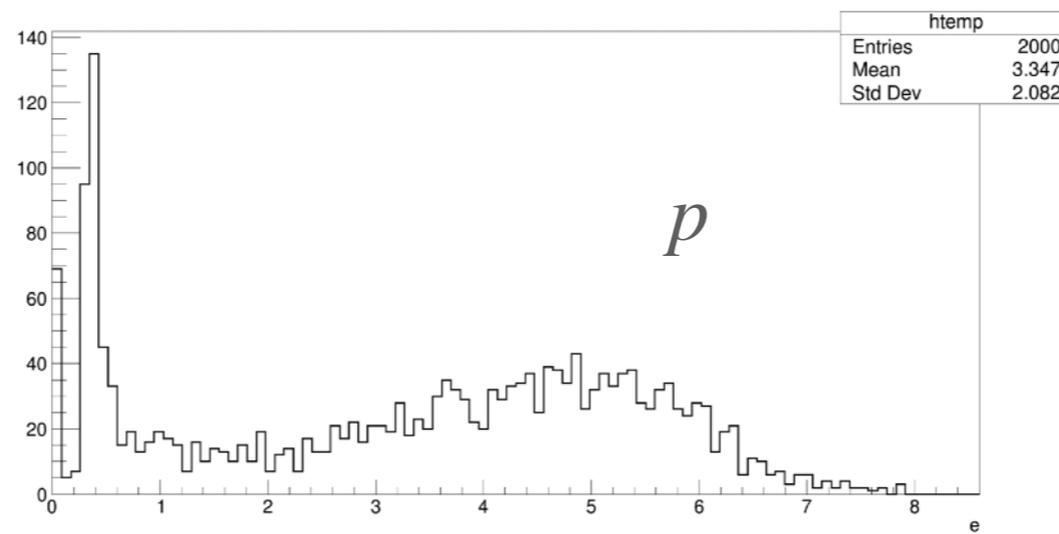
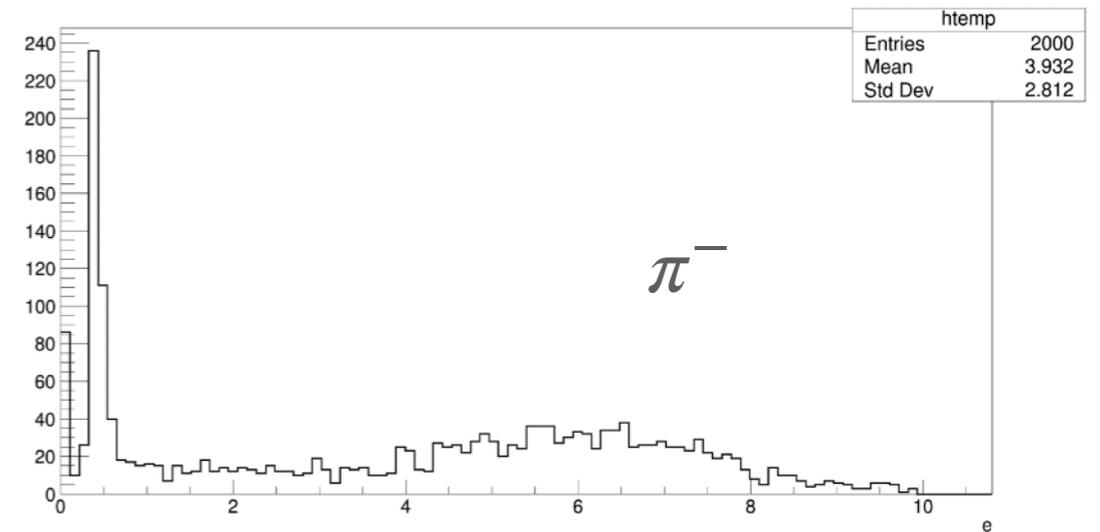
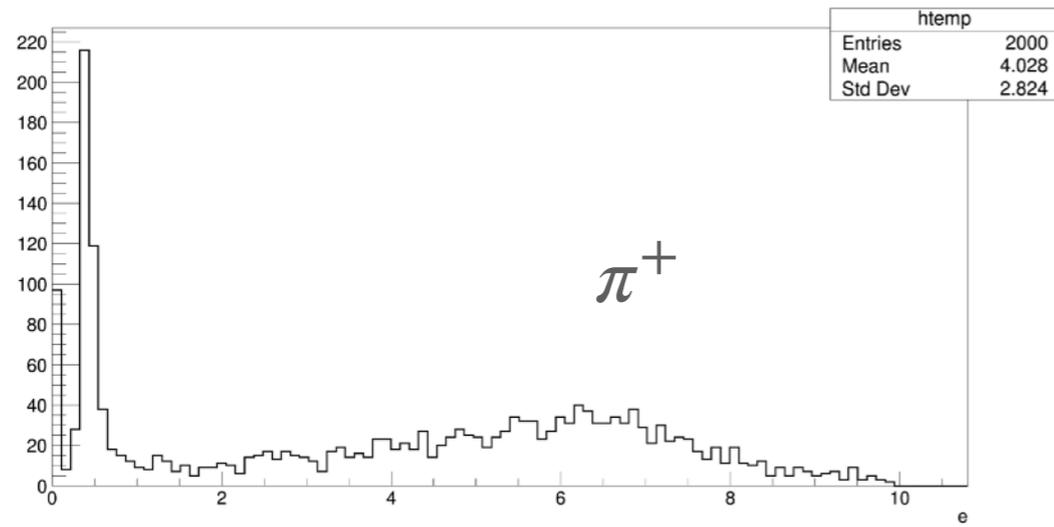
Eta Range (-0.2,0.2)

All other detectors and magnet are off

$$\frac{\sigma_E}{E} = \frac{S}{\sqrt{E}} + \frac{N}{E} + C$$



Hadrons Energy measured (from shower information)



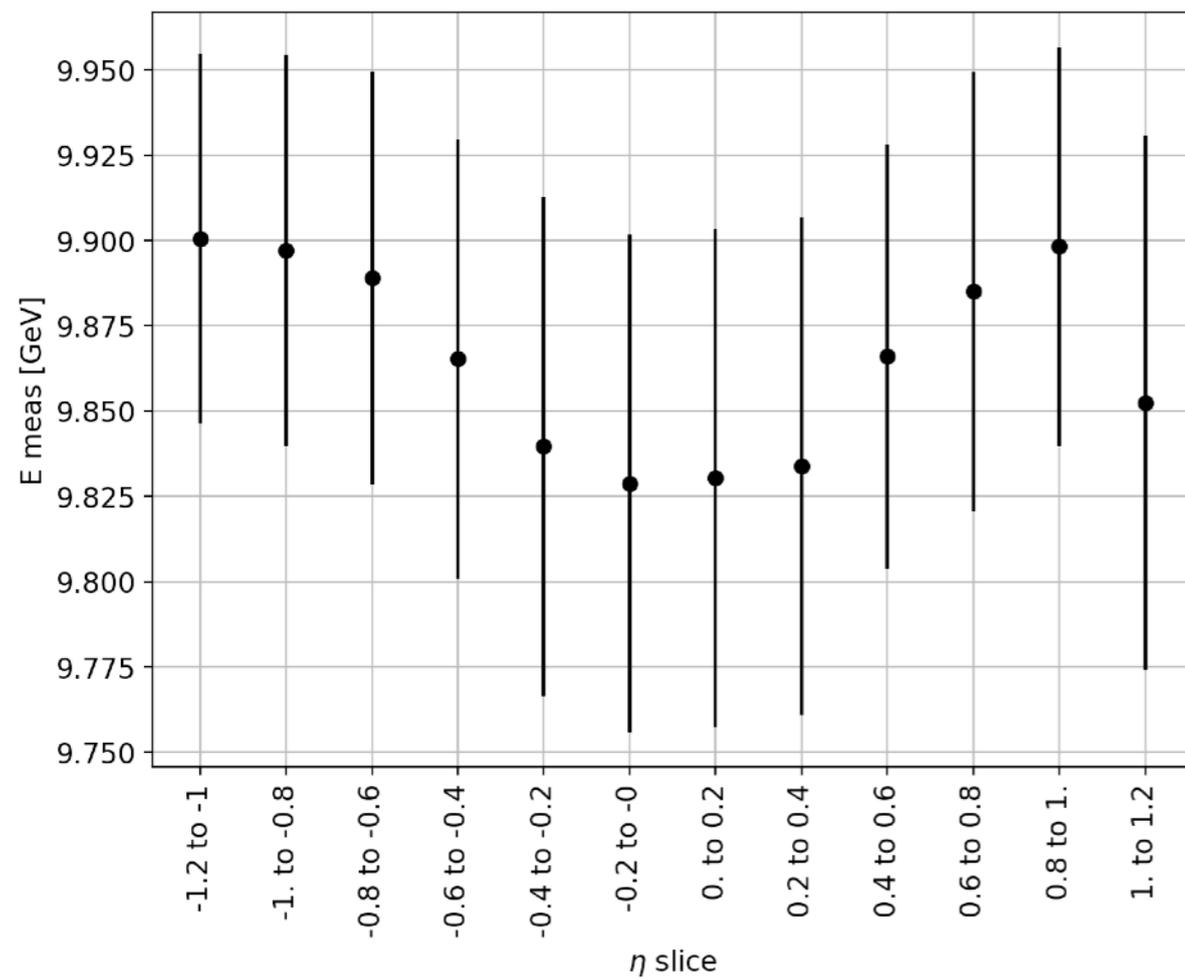
Generating:

Simple Sample

Electrons at 10 GeV

All other detectors and magnet are off

Slicing in η



Slicing in ϕ

