

Fun4All Calorimeter Plots: Investigating MIPs with monoenergetic muons & pions in Calorimeters

Simran
Lokesh Kumar
Panjab University, Chandigarh, INDIA

Fun4All QA Biweekly Meeting
November 12, 2021

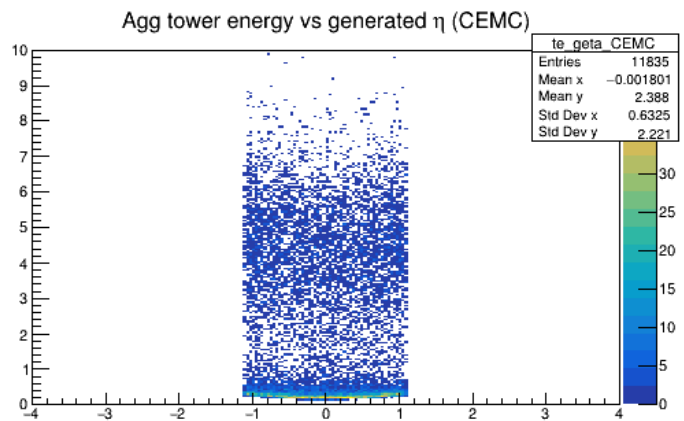
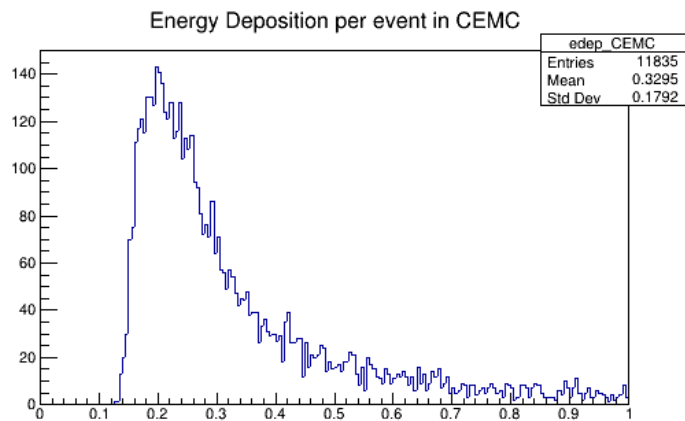
Specifications:

- Particles: pi-, mu-
- Given energy (ge): 4 GeV
- Events: 42300 (pi-), 46900 (mu-)
(Generated by Sagar & Siddhant)
- Pseudorapidity cuts on calorimeters:
 - EEMC: $\eta = -3.5$ to -1.7
 - CEMC: $\eta = -1.1$ to 1.1
 - HCALIN: $\eta = -1.1$ to 1.1
 - HCALOUT: $\eta = -1.1$ to 1.1
 - FEMC: $\eta = 1.3$ to 3.3
 - FHCAL: $\eta = 1.3$ to 3.3

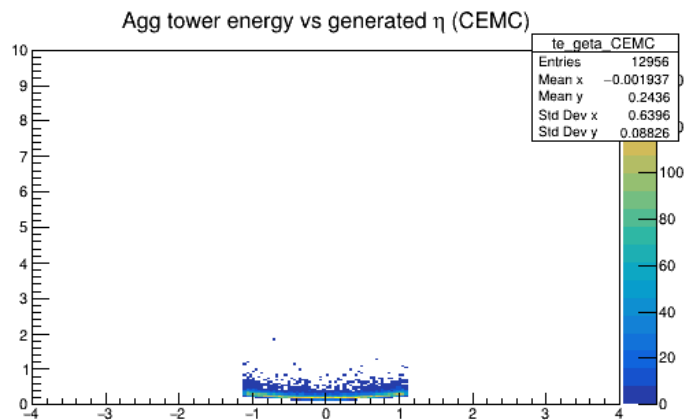
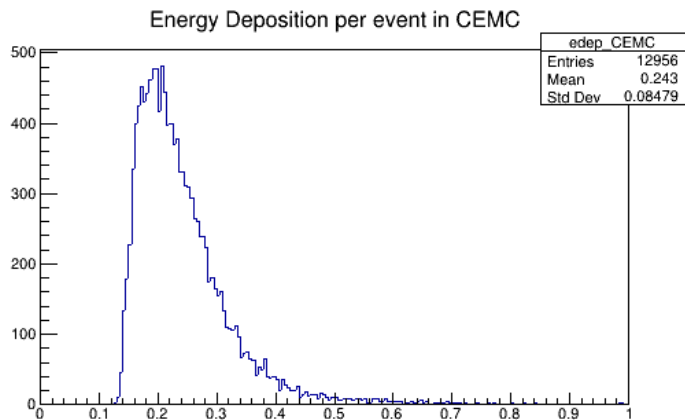
CEMC

$\eta = -1.1$ to 1.1

Pion:



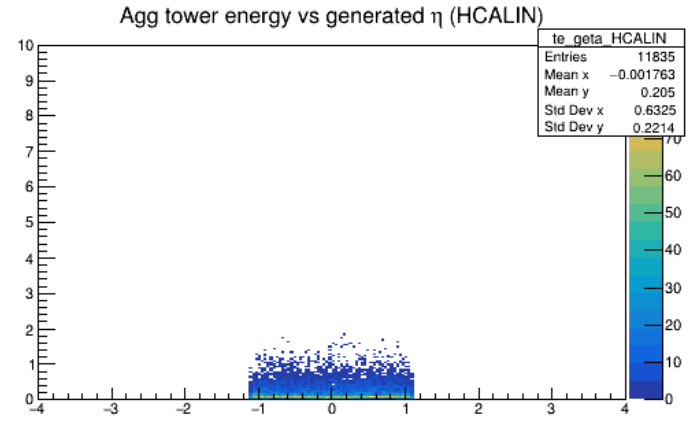
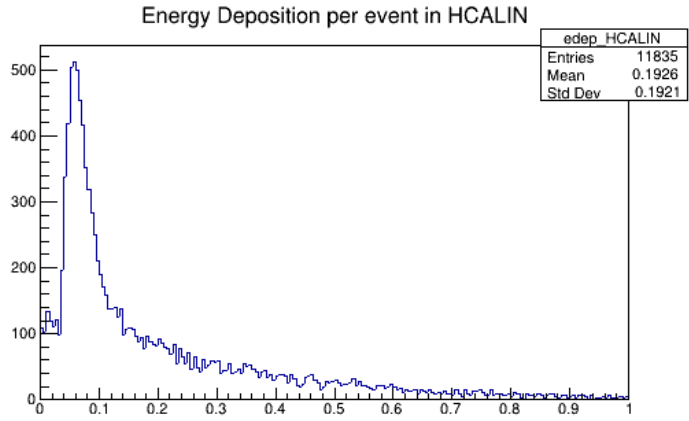
Muon:



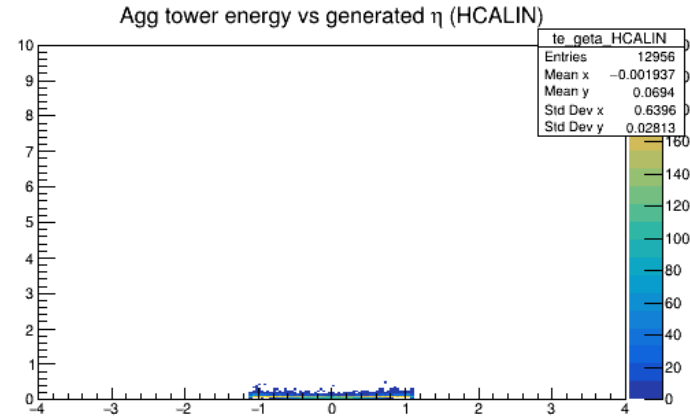
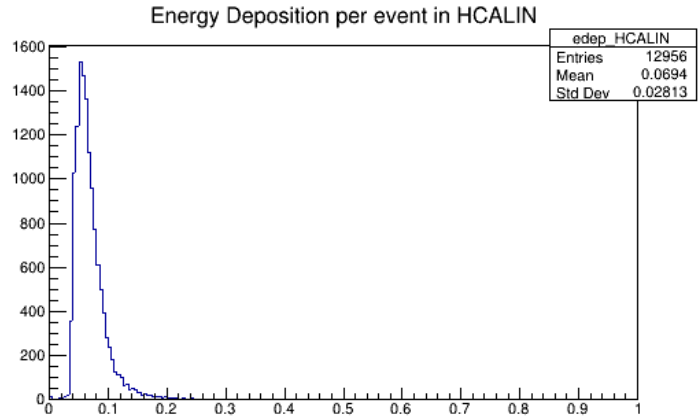
HCALIN

$\eta = -1.1$ to 1.1

Pion:



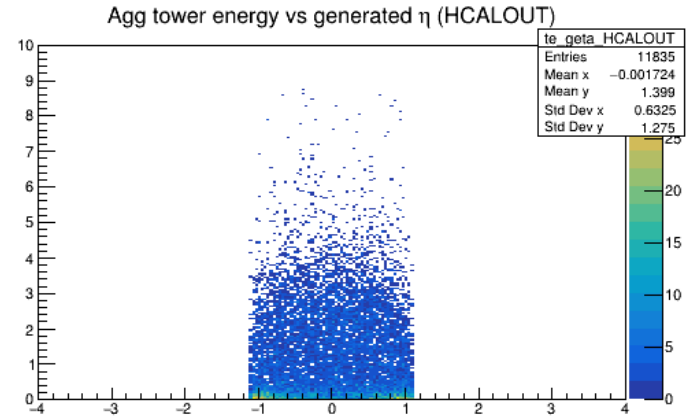
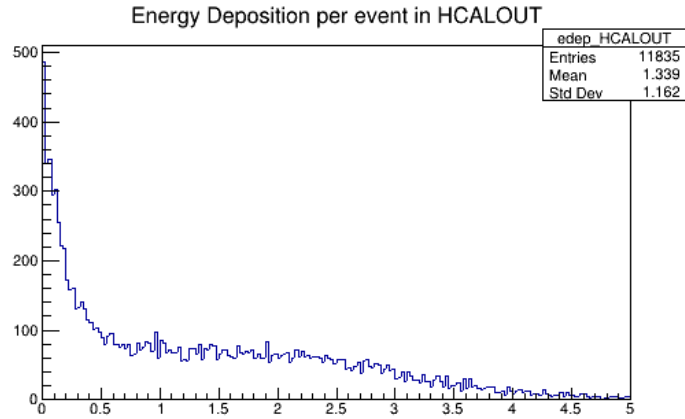
Muon:



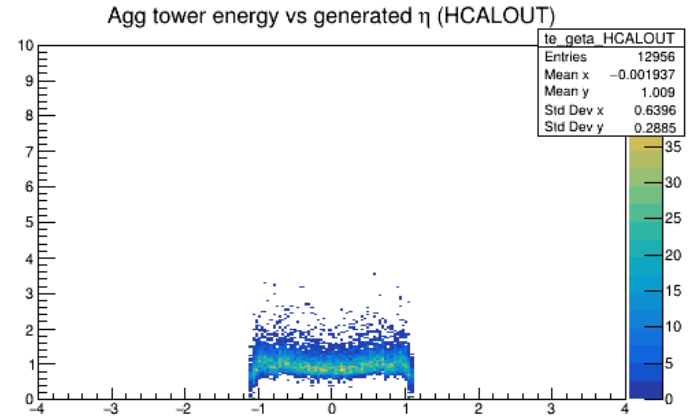
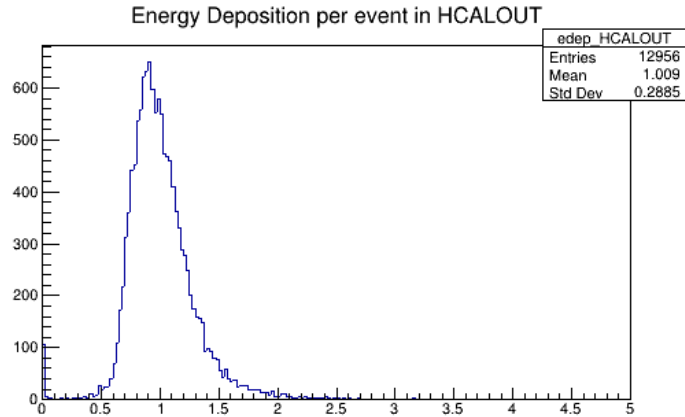
HCALOUT

$\eta = -1.1$ to 1.1

Pion:



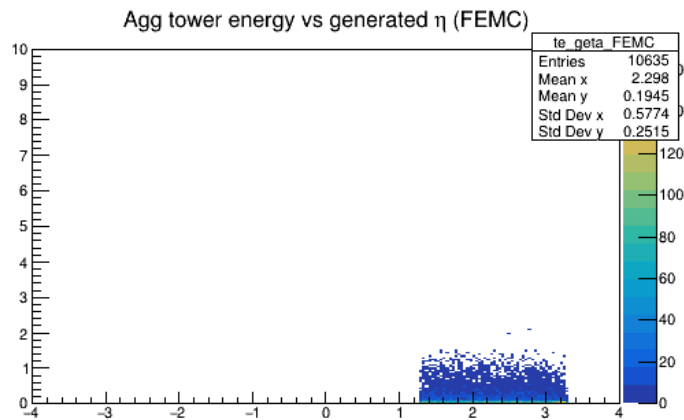
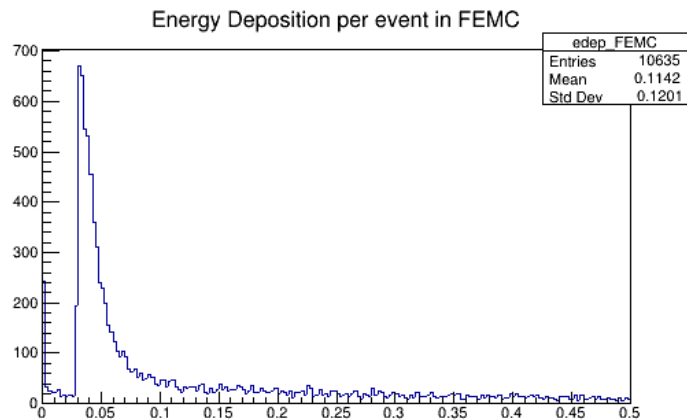
Muon:



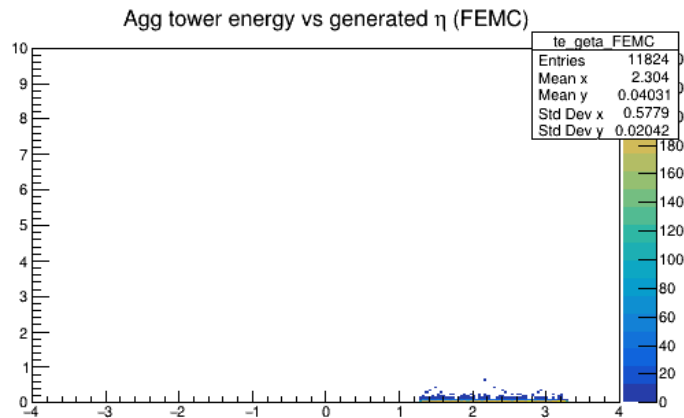
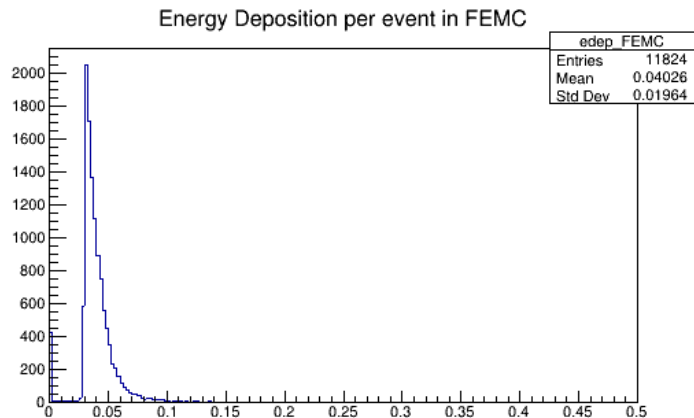
FEMC

$\eta = 1.3$ to 3.3

Pion:



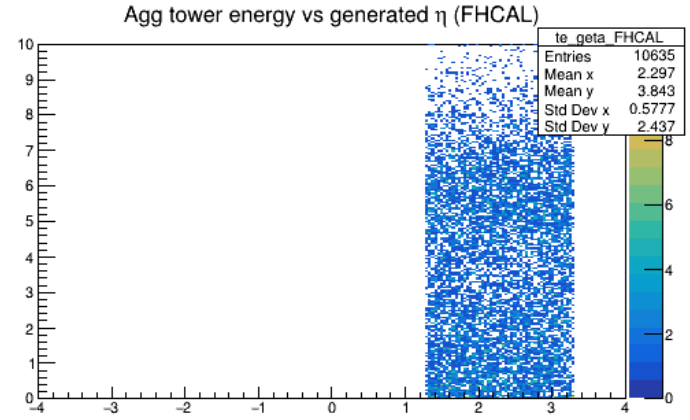
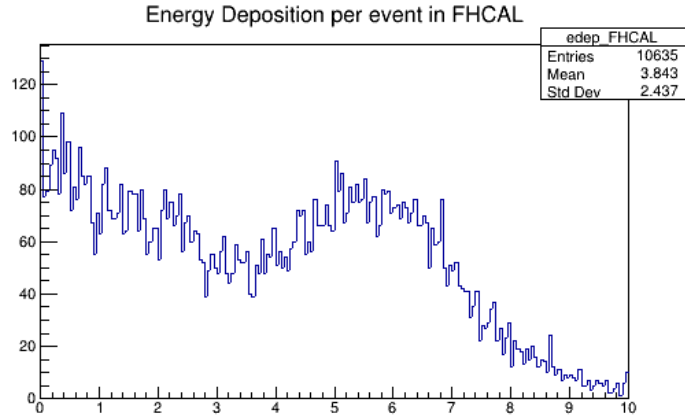
Muon:



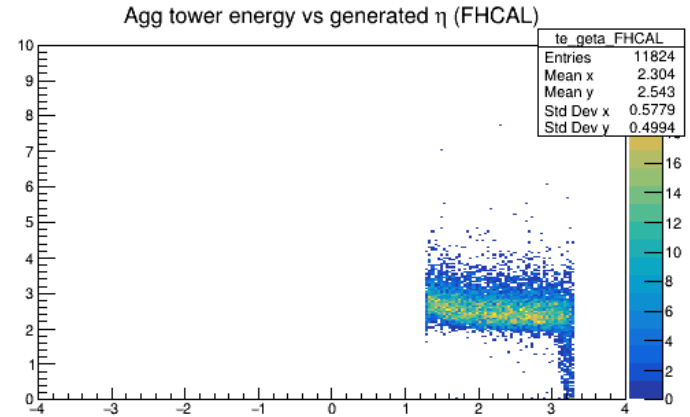
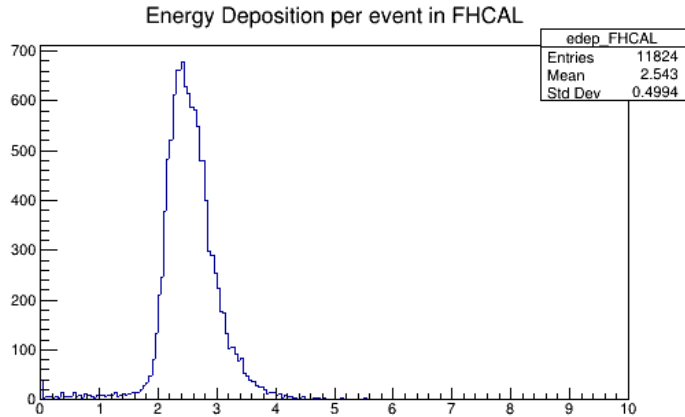
FHCAL

$\eta = 1.3$ to 3.3

Pion:



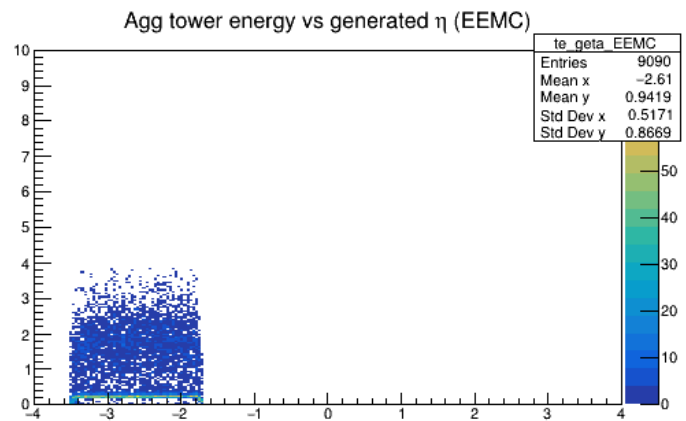
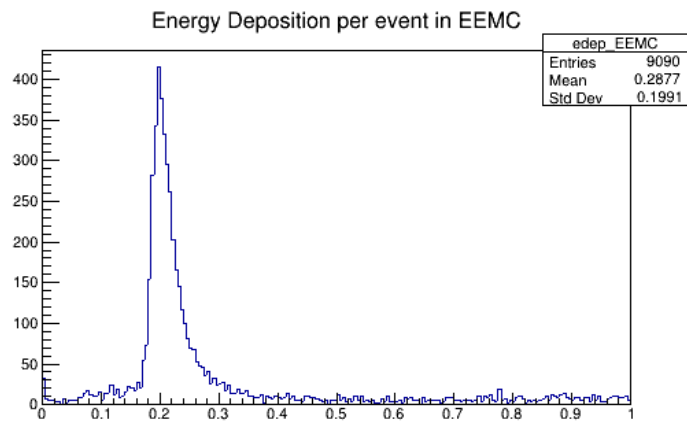
Muon:



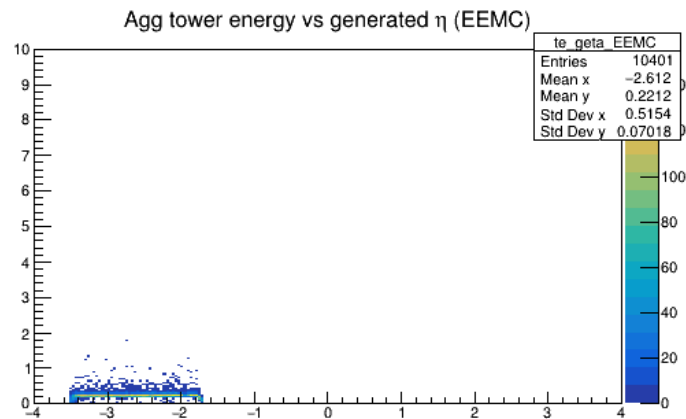
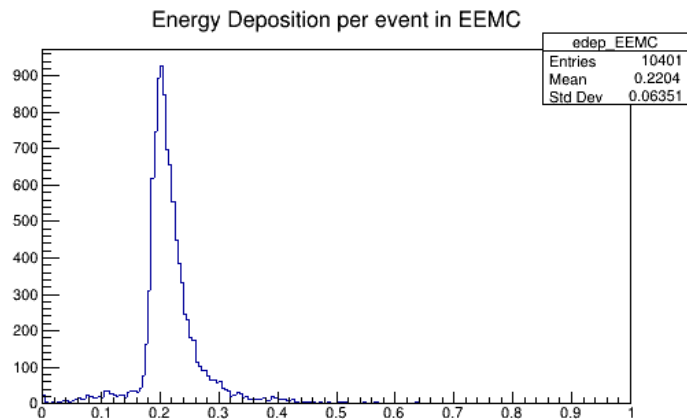
EEMC

$\eta = -3.5$ to -1.7

Pion:



Muon:



THE END