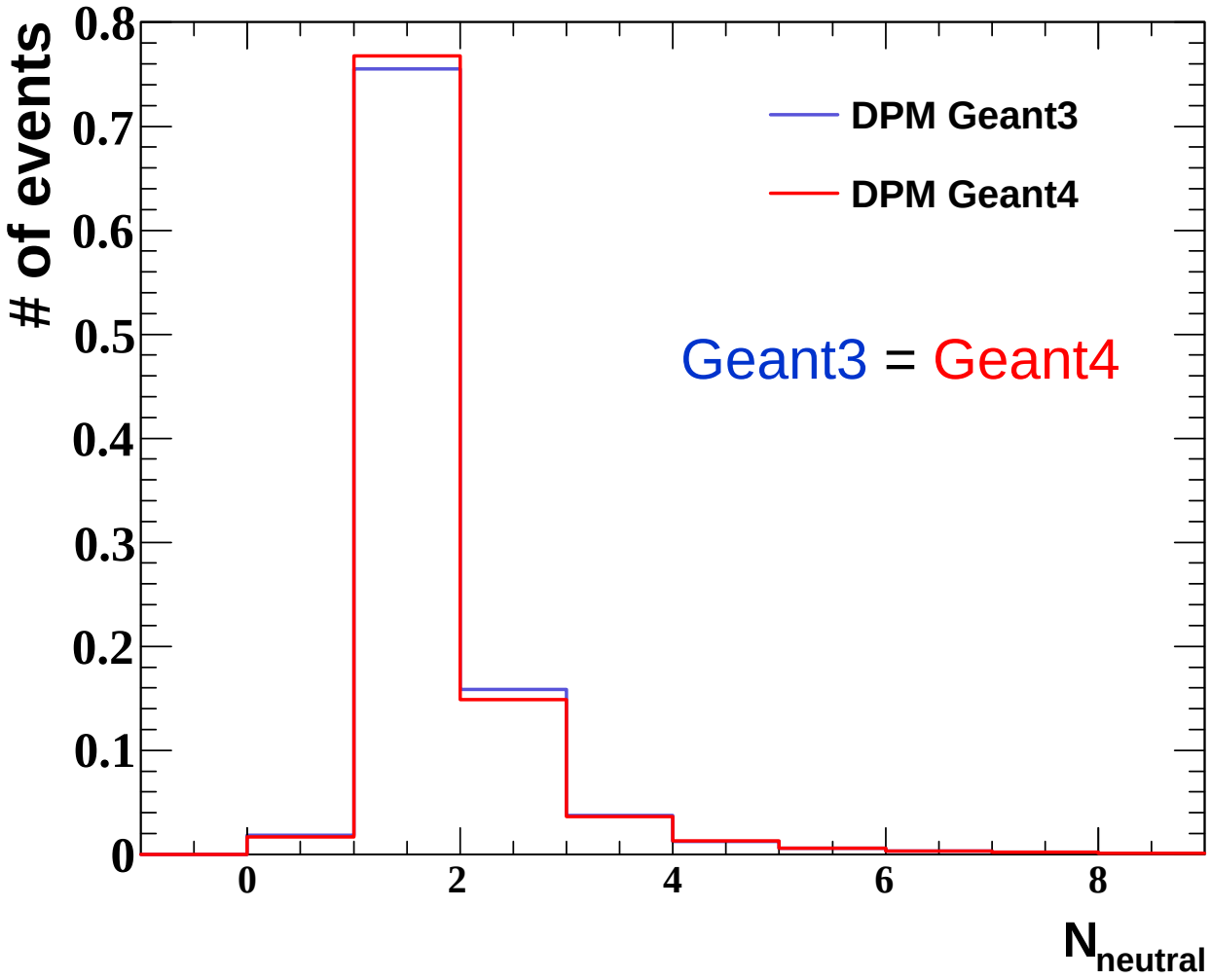
Box generator : single photon

$0.1 < E < 5.0$ GeV

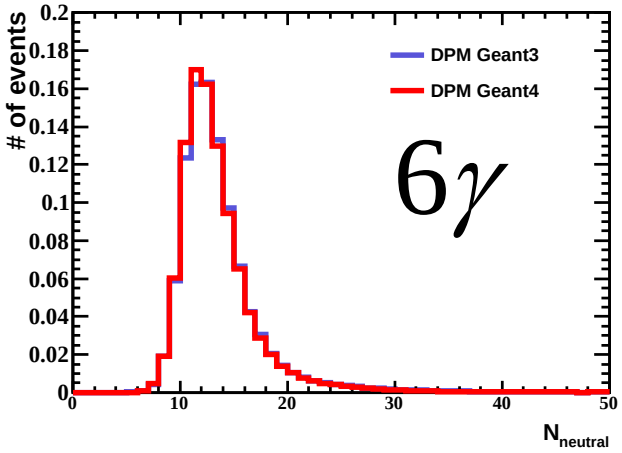
$5^\circ < \theta < 150^\circ$

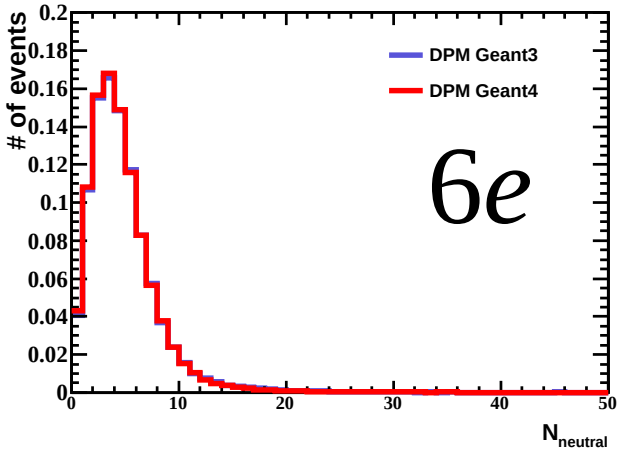


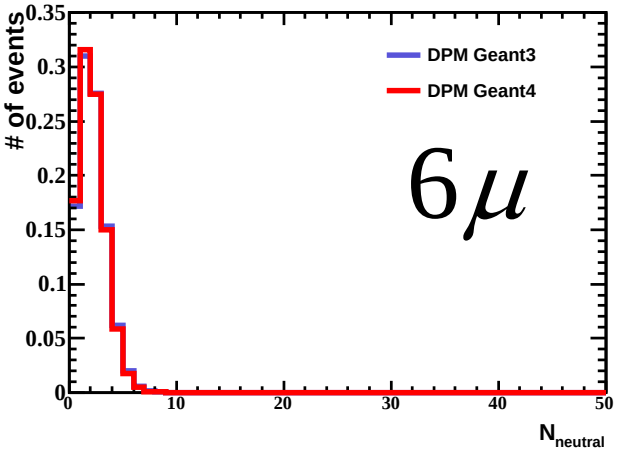
Box generator : 6 particles

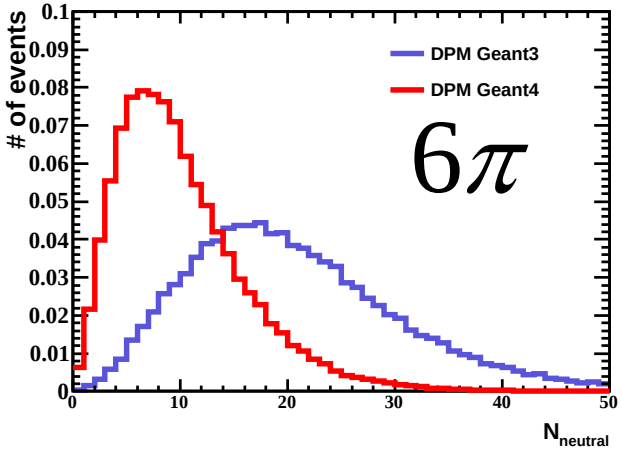
0.1 < E < 5.0 GeV

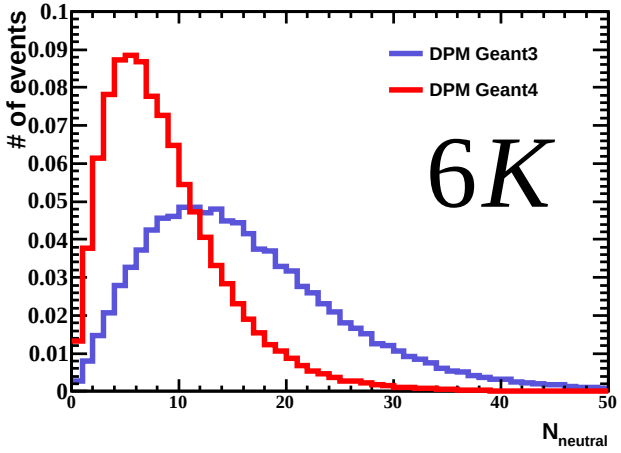
5°< θ < 150°

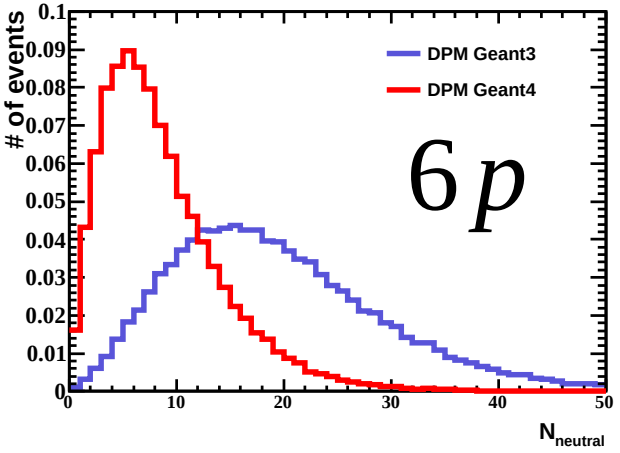






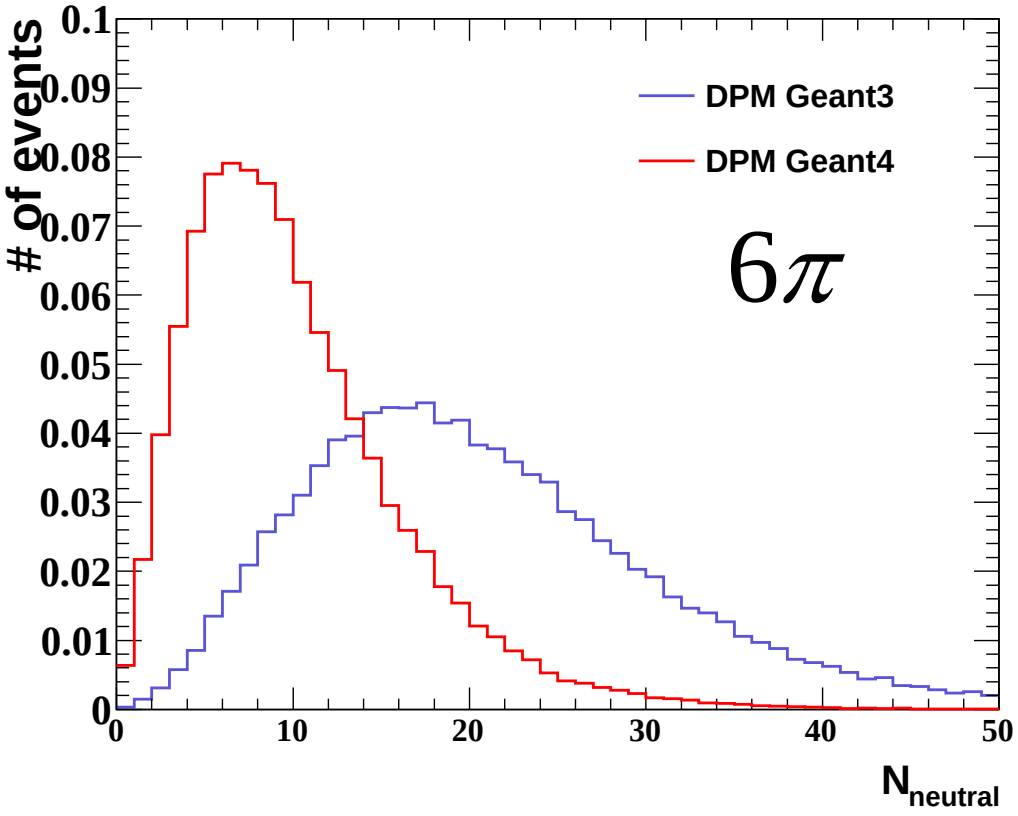




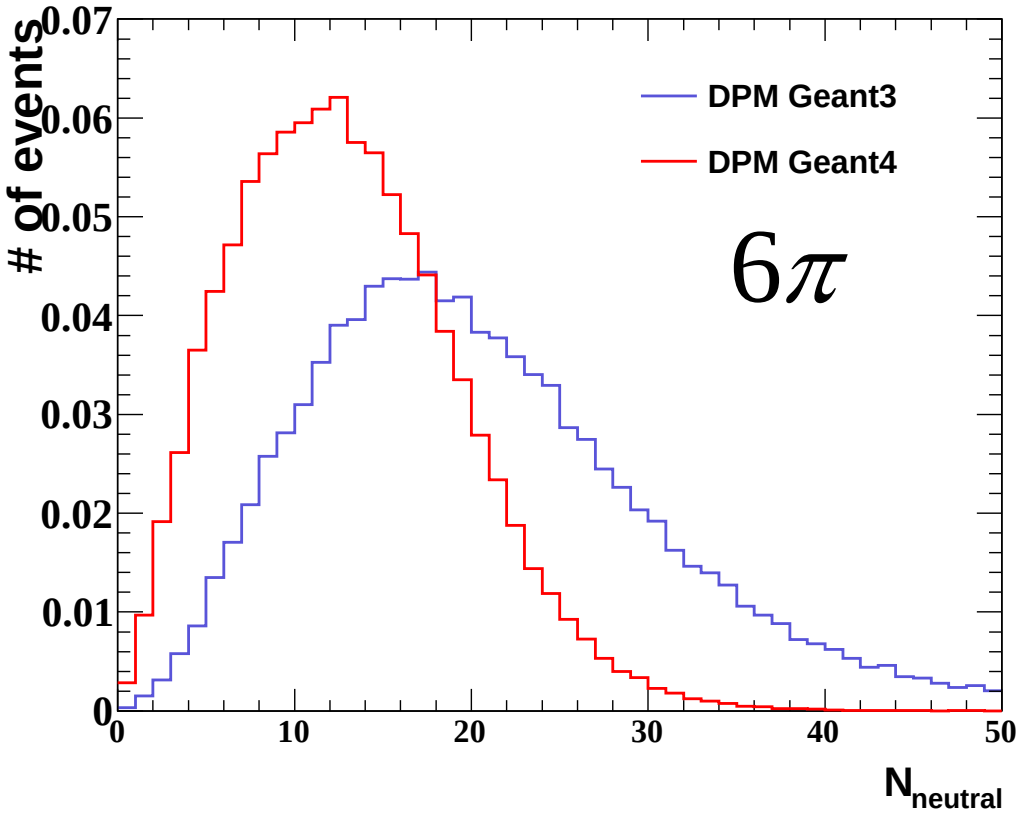


In g4Config.C one can configure options for the TG4SpecialPhysicsList

Turns On (default)
- StepLimiter
- SpecialCuts
- SpecialControls



Turns Off



For Geant4, multiplicity increase slightly in the neutral candidate list

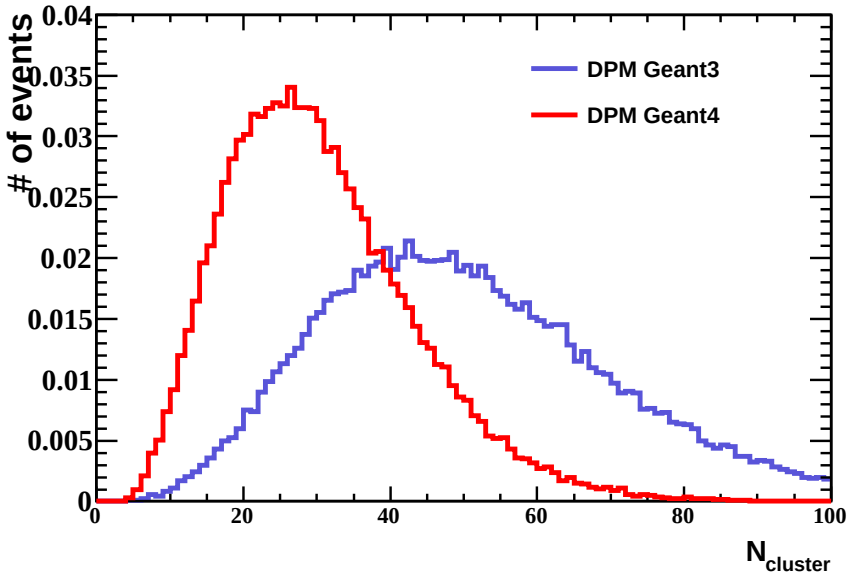
For Geant4, multiplicity increase slightly in the neutral candidate list

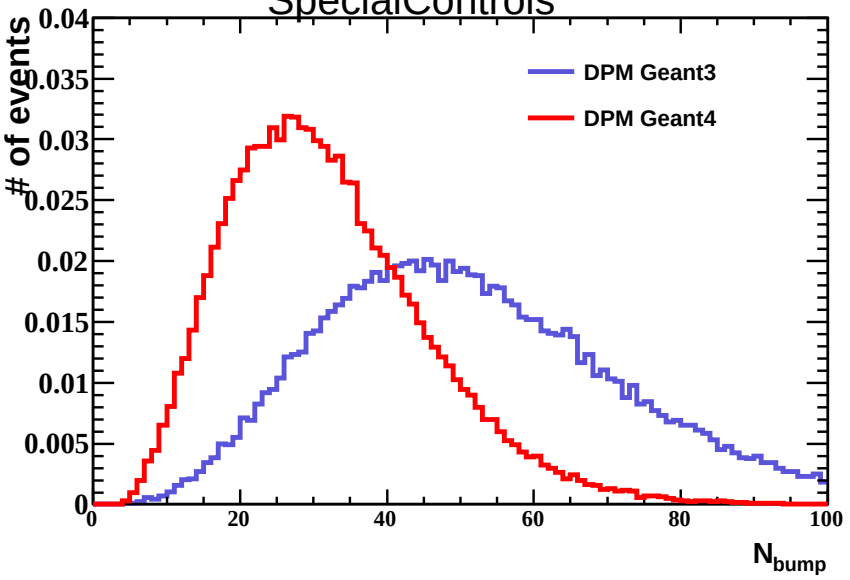
Then try to look digtization level

Specially, total size of EMC cluster and Sum of energy in the cluster

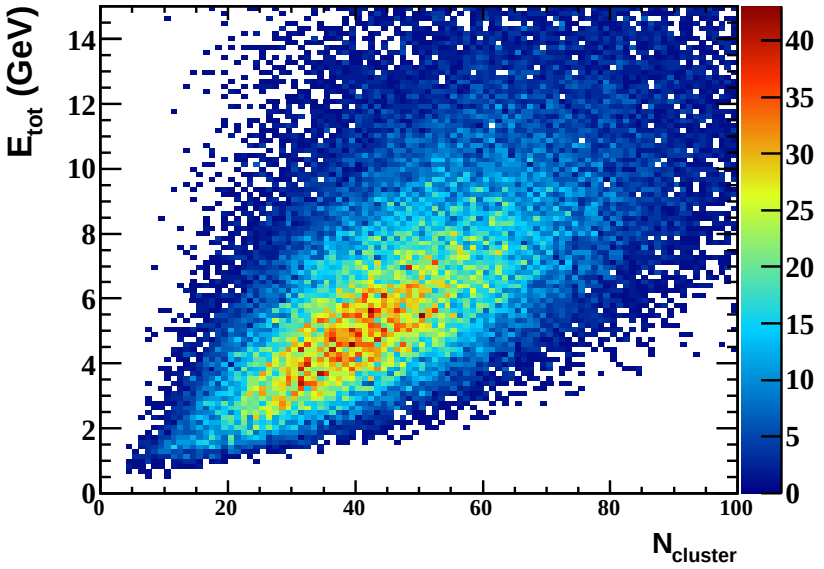
Box generator : 6 particles
0.1 < E < 5.0 GeV
5°< θ < 150°

Turns On (default) @ Geant4
StepLimiter
SpecialCuts
SpecialControls

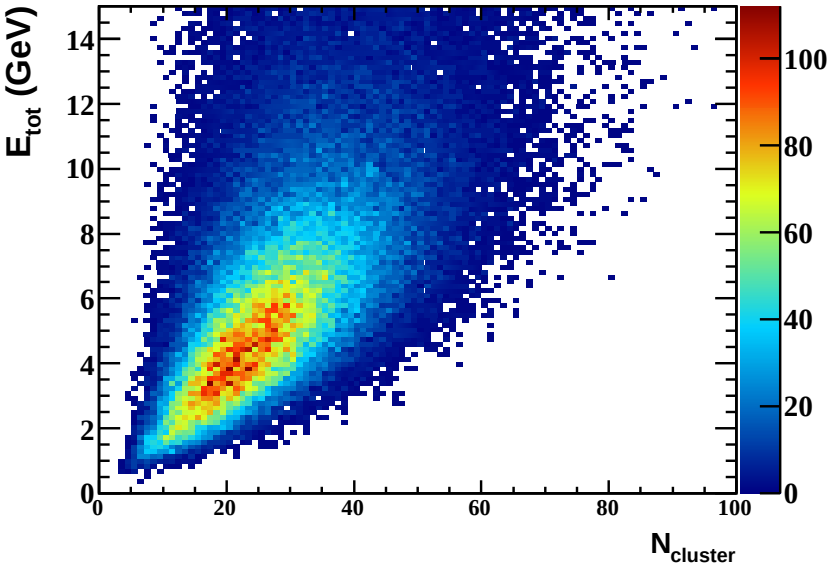




Geant3 : E_{tot} vs $EMC_{cluster}$

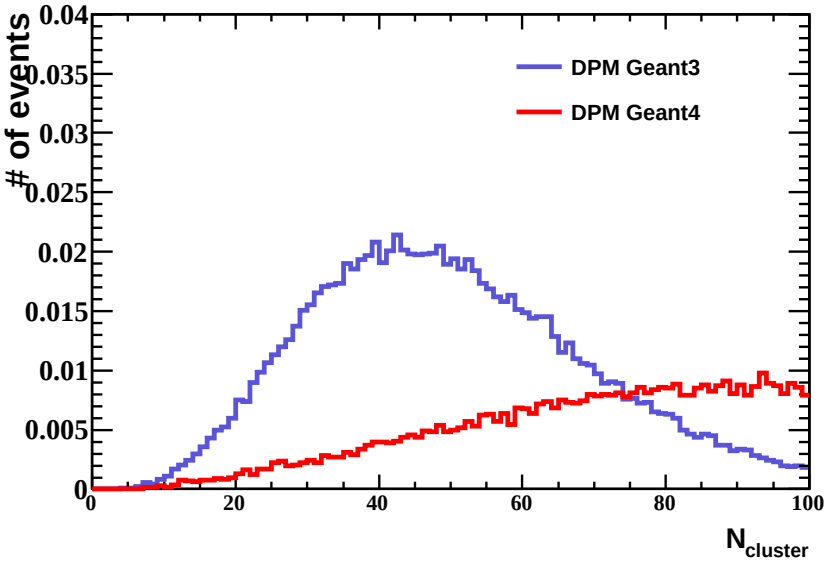


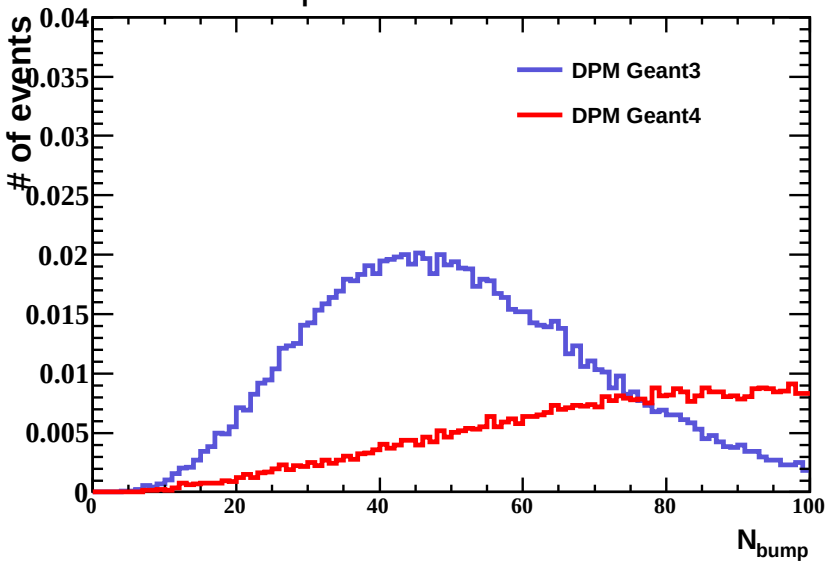
Geant4 : E_{tot} vs $EMC_{cluster}$



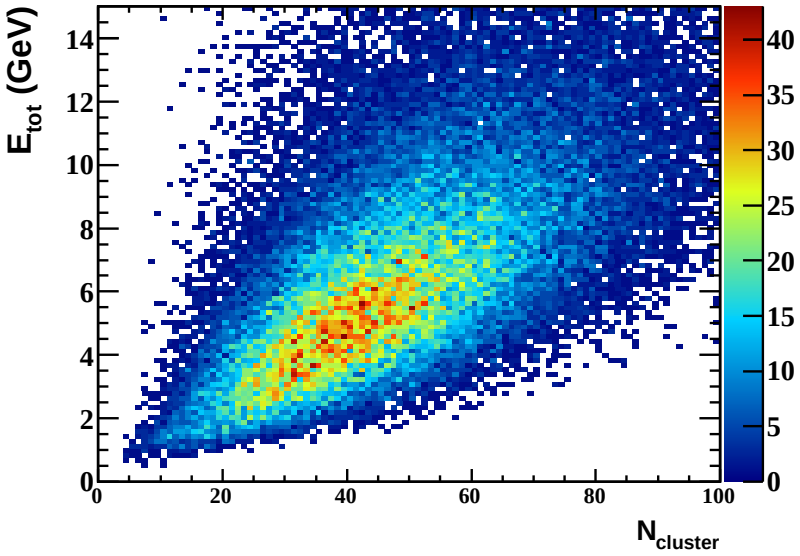
Box generator : 6 particles
0.1 < E < 5.0 GeV
5°< θ < 150°

Turns off @ Geant4
StepLimiter
SpecialCuts
SpecialControls

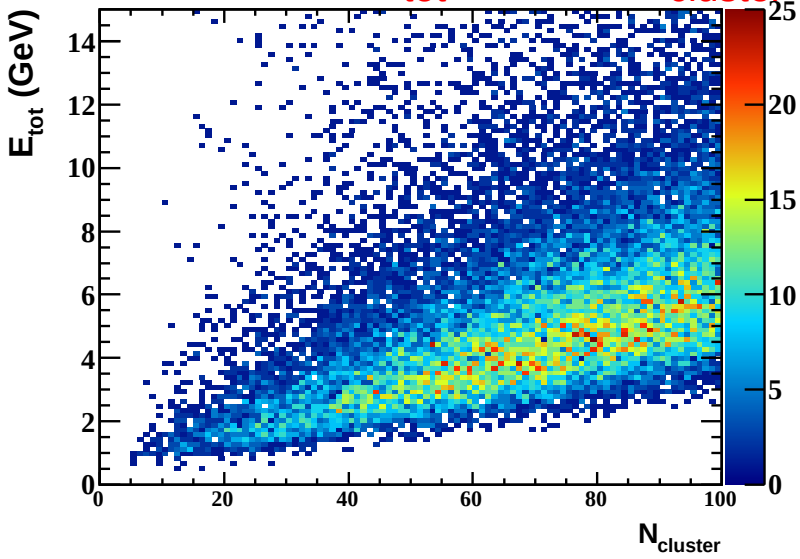




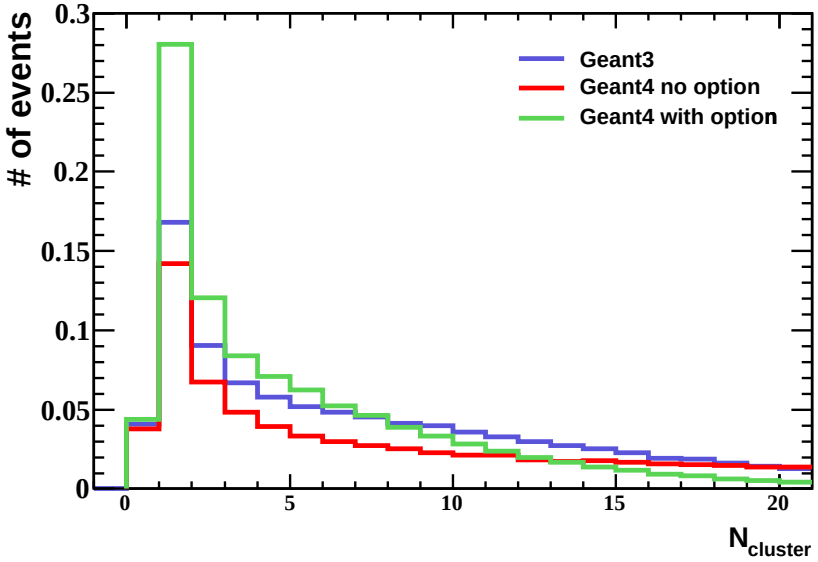
Geant3 : E_{tot} vs $EMC_{cluster}$



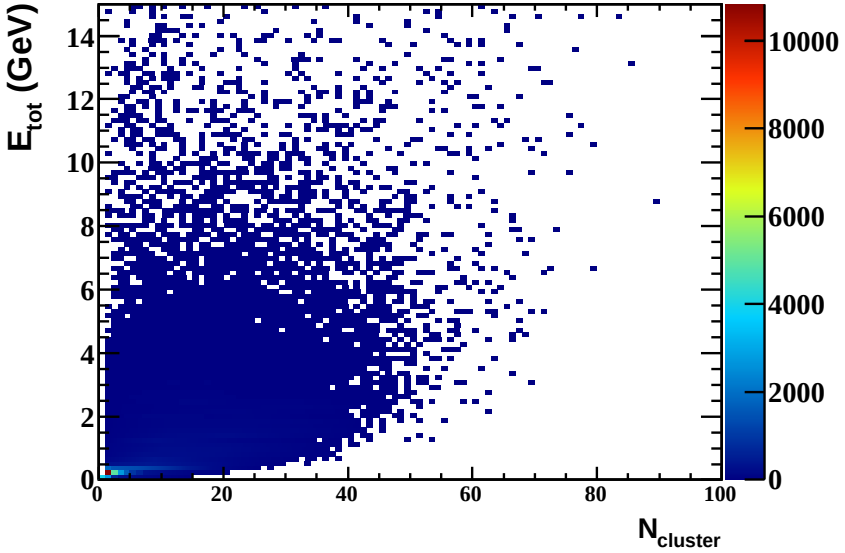
Geant4 : E_{tot} vs $EMC_{cluster}$



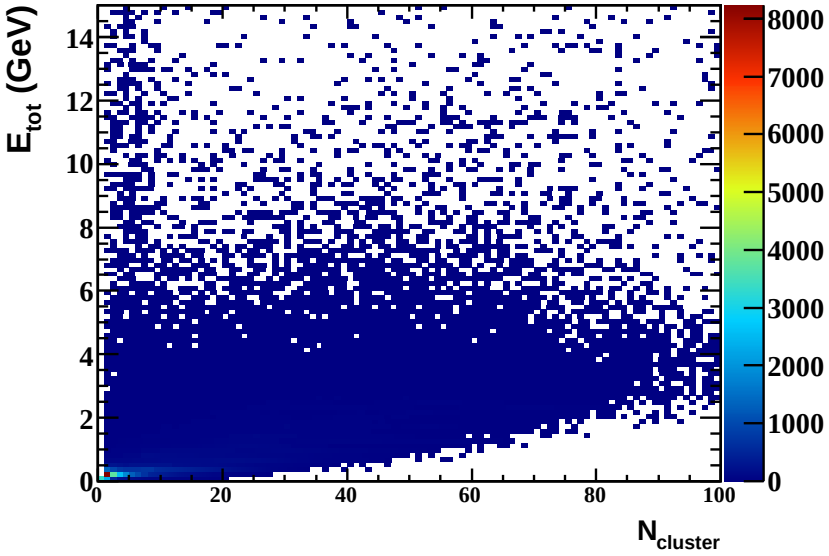
Box generator : 1 particle pion
0.1 < E < 5.0 GeV
5°< θ < 150°



Geant3 : E_{tot} vs $EMC_{cluster}$



Geant4 no option



Geant4 with option(default)