Comparison of data and Simulation for electrons "June 2018"

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AHCAL Analysis Workshop

Desy, 13th Dec. 2018

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Motivation

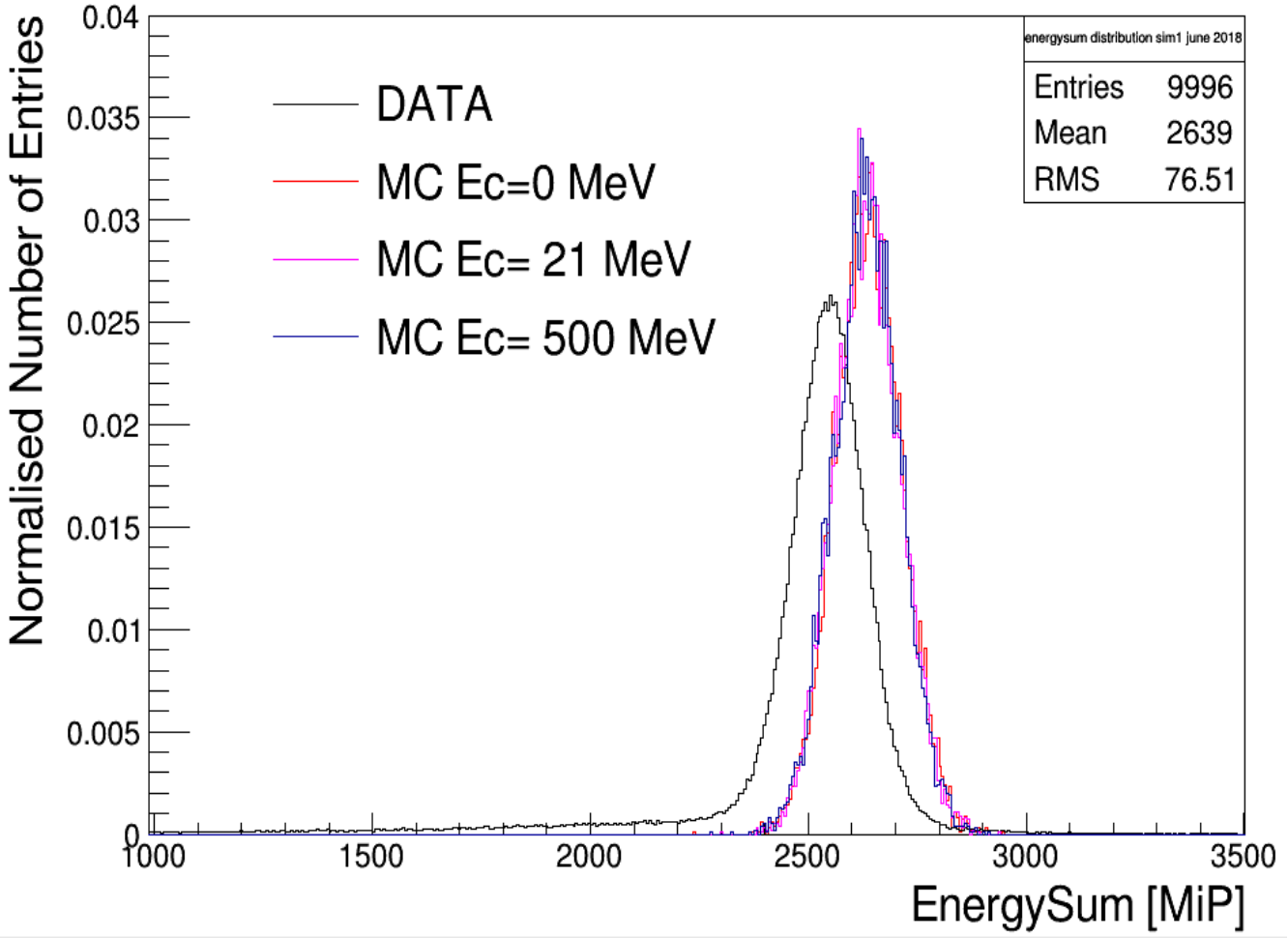
- Hits distribution of the simulation is higher then data!!
- Remarque from Mika : to check the Critical Energy.
- Eldwan checked : Ec=0

```
56  class G4UserLimits
57  {
58  public:  // with description
59
60    G4UserLimits(G4double ustepMax = DBL_MAX,
61                 G4double utrakMax = DBL_MAX,
62                 G4double utimeMax = DBL_MAX,
63                 G4double uekinMin = 0.,
64                 G4double urangMin = 0. );
65    G4UserLimits(const G4String& type,
66                 G4double ustepMax = DBL_MAX,
67                 G4double utrakMax = DBL_MAX,
68                 G4double utimeMax = DBL_MAX,
69                 G4double uekinMin = 0.,
70                 G4double urangMin = 0. );
71    virtual ~G4UserLimits();
```

Motivation

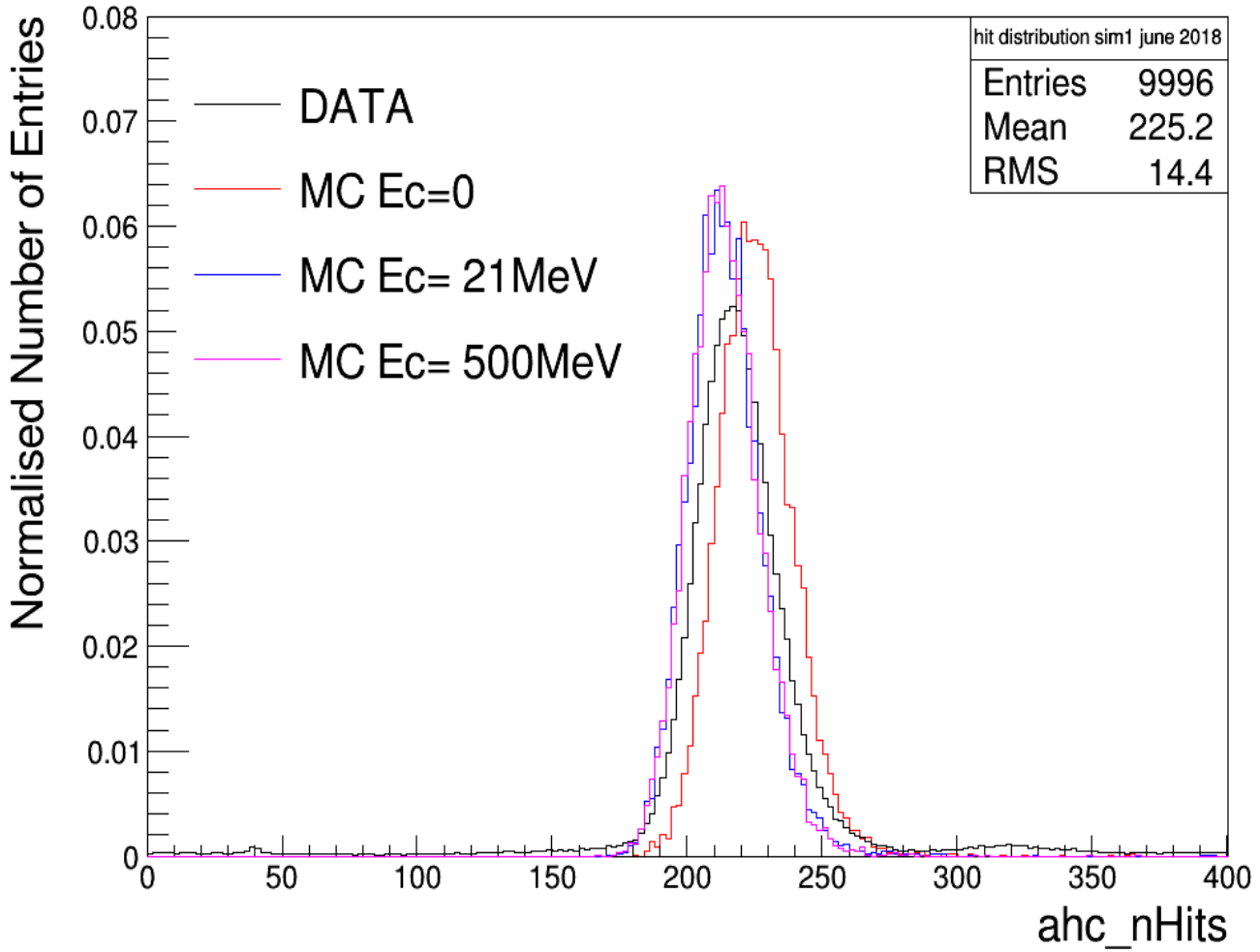
- Simulation was done for Ec= 21 MeV(Eldwan) and 200 MeV(unphysical value).
- The critical energy is material dependent: $$E_c = \frac{610\,\mathrm{MeV}}{Z + 1.24}$$
- For G4_polystyrene : Z = 11.159 => Ec = 49.20 MeV

Energy_sum distribution for data and simulation: e- 60 GeV



- No high influence of the Ec to the E_sum distribtion.

Hit distribution for data and simulation: e- 60 GeV



- No high influence of the Ec to the E_sum distribtion.