Calorimeter Fast Sim Update

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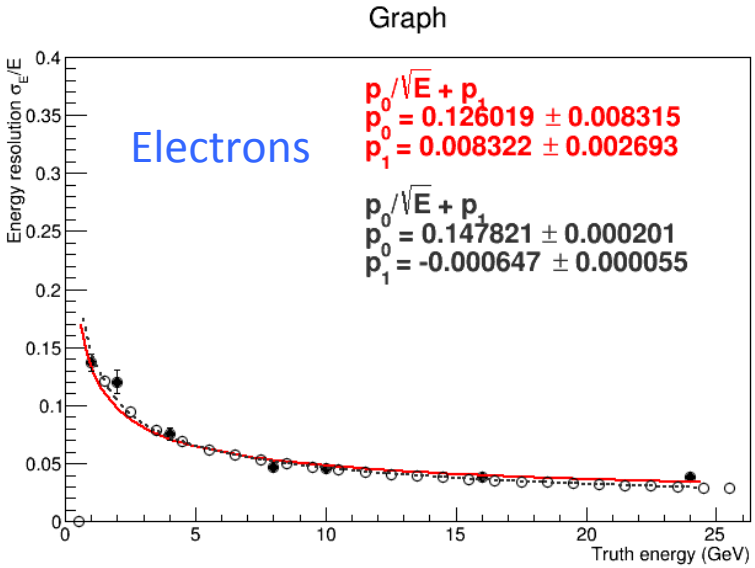
2-23-2016

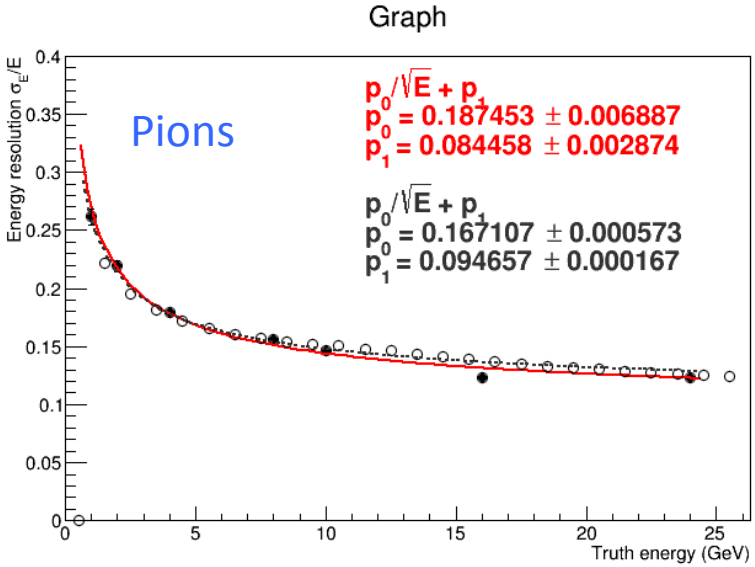
Outline

- Developing simple black hole method
  - Integrated EMCal and Hcal
- Energy resolution
- Spatial distribution

Energy Resolution

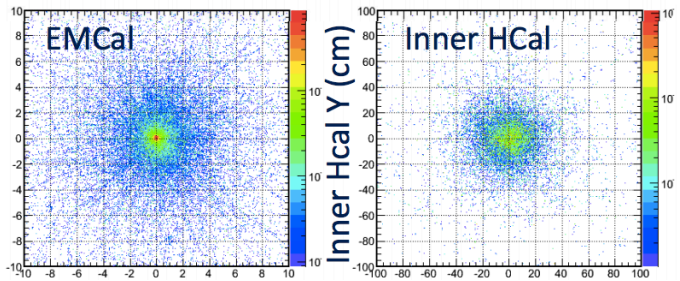
- Single particle energy resolution
- Closed circles from full G4 sim
  - Sum of EMCal + Hcal_in + Hcal_out
- Open circles from fast sim





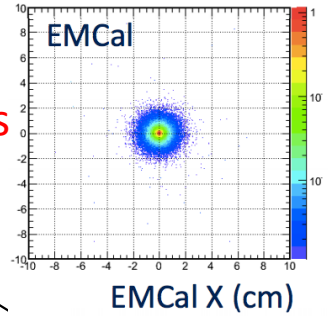
Spatial Distribution

pions

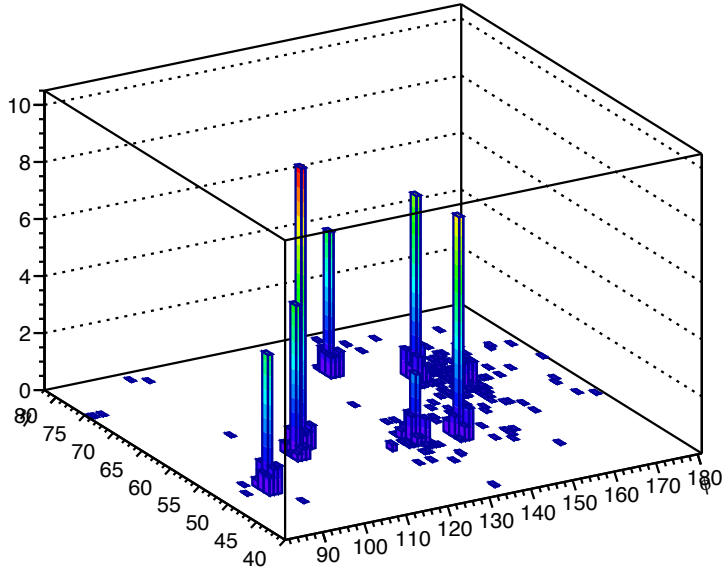


- Implemented basic spreading of energy
  - Probably okay for electrons
- Working towards more realistic hadron spreading

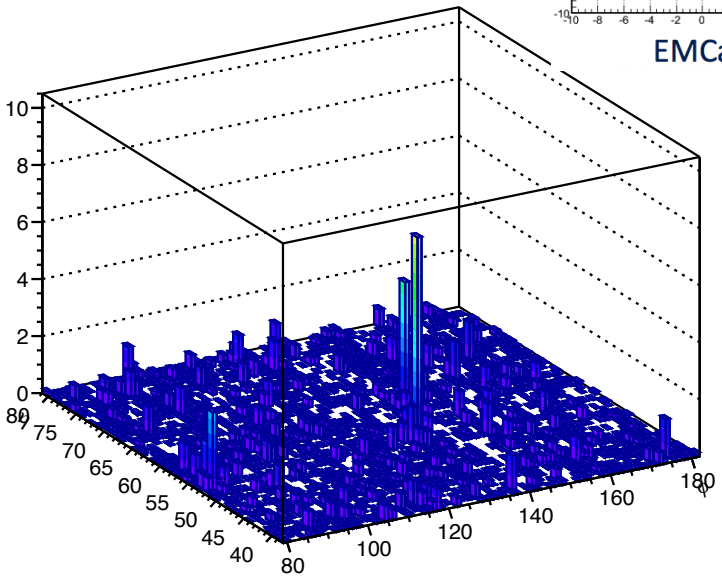
electrons



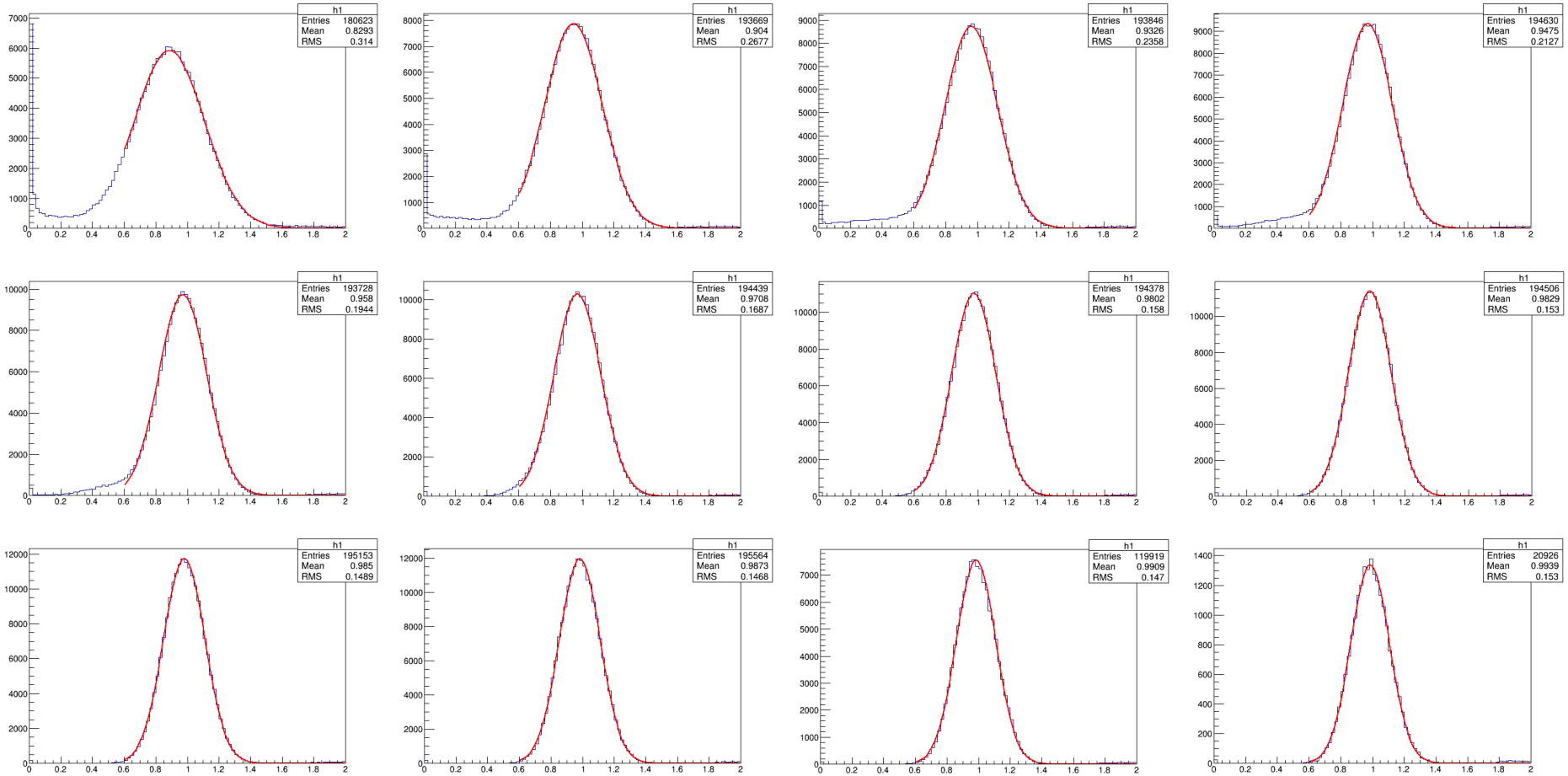
Single pions



Pions embedded in HIJING



Next

- Better hadron spreading
- Finally, study tracking performance with energy matching cuts

Pion Energy Resolution Fits