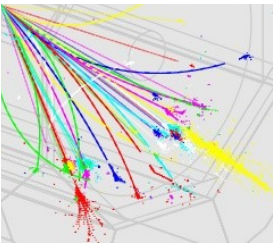
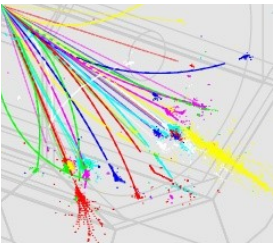


Digital HCAL with Pandora

SiD PFA Meeting

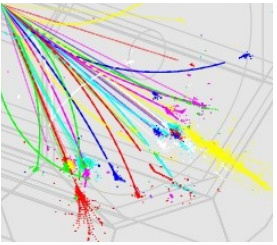
02.12.2010

M. Stanitzki



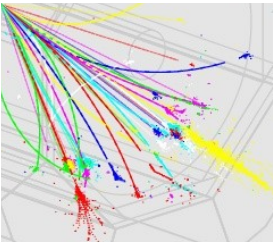
RECAP from 14.05.2008

- use **LDC00** instead of **LDC00Sc**
- in **PandoraPFA 2.x**
  - **DigitalHCAL=1**
- In **MokkaCaloDigi**
  - **DigitalHCAL=1**
  - **adjust thresholds**



Status

- Simulated two versions
  - LDC00
  - SIDish_RPC
- basically the same as LDC00Sc and SIDish
- Didn't change any of the cuts

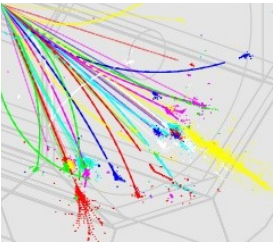


Results

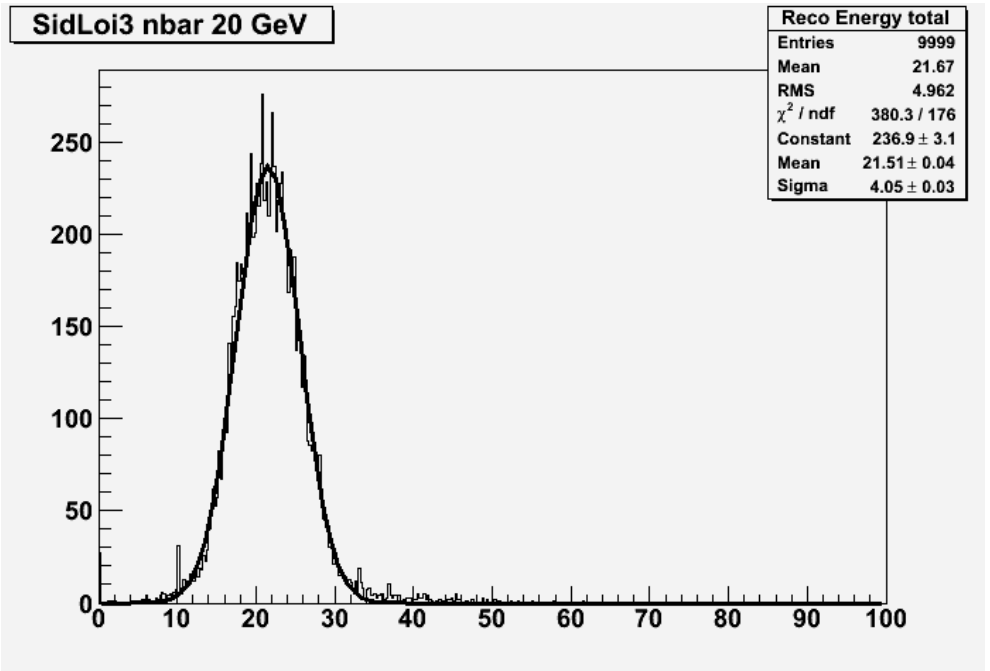
Scintillator

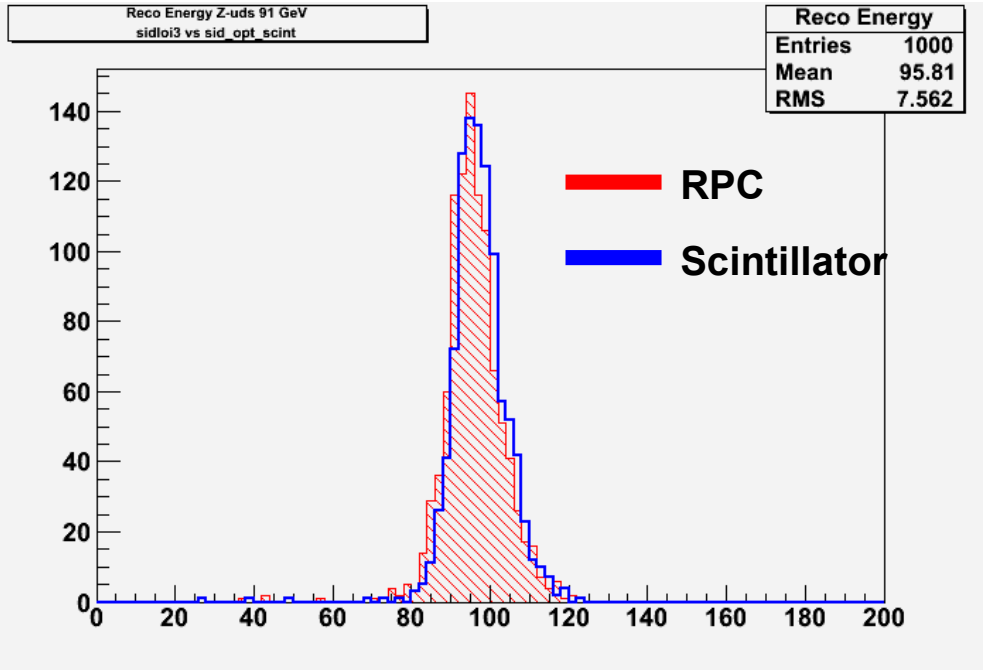
RPC

Detector	91 GeV		200 GeV	
	α %	Error	α %	Error
LDC00Sc	24.6	0.3	29.7	0.5
LDC00	27.0	0.5	31.7	0.6
SIDish	27.9	0.4	35.4	0.7
SIDish_rpc	31.7	0.5	38.9	0.7

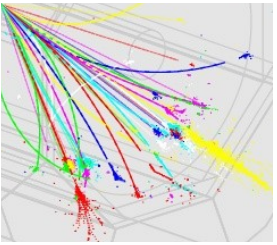


Where are we today ?



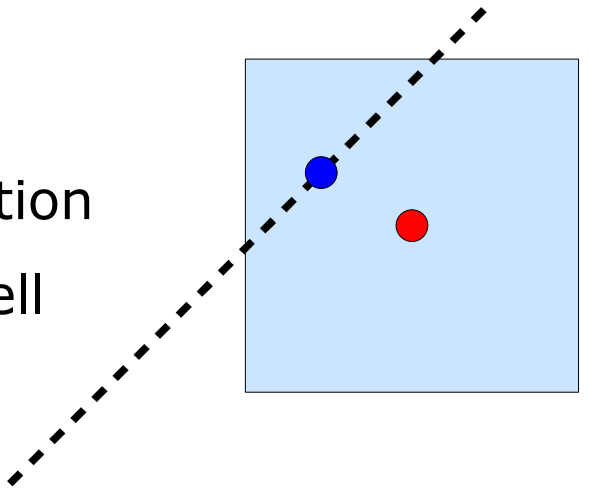


This is from August 2010....
Test runs so don't get too excited



Things that need doing

- RPC digitization
  - Code is ready
  - But is lacking LCIO information
  - Needs the location in the Cell
  - Not provided by LCIO



- Two ways around this
  - random position assignment in the cell
  - Or extending LCIO
- First one is fast and ok for showers
- Second one is more correct
  - Beneficial for RPC, GEMS, MAPS (everything with a charge cloud)