
Subject: Re: GEM Tracking inside LHETRACK
Posted by [Ralf Kliemt](#) on Fri, 26 Jun 2009 14:56:28 GMT
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Hi all.

As feedback/comment I reproduced Stefanos Plots with 1000 pions each at 1 GeV/c. Theta ranges from 20 to 140 Deg. Just to check if there is no big flaw.

You need to implement the gem library with `gSystem->Load("libGem");`.

Simulation:

```
FairDetector *Gem = new PndGemDetector("GEM", kTRUE);  
Gem->SetGeometryFileName("gem_3Stations.root");  
fRun->AddModule(Gem);
```

Digi & Reco:

```
// ----- GEM hit producers -----  
PndGemDigitize* gemDigitize = new PndGemDigitize("GEM Digitizer", iVerbose);  
fRun->AddTask(gemDigitize);  
  
PndGemFindHits* gemFindHits = new PndGemFindHits("GEM Hit Finder", iVerbose);  
fRun->AddTask(gemFindHits);
```

Find the parameters in `pandaroot/macro/params/all.par`

Add to LHETrack with:

```
trackMS->SetGemMode(2); // 0 OFF, 1 GEMPoint, 2 GEMHit // GEMPoint smearing [cm],  
if negative no smearing
```

Here the plots with STT

and TPC

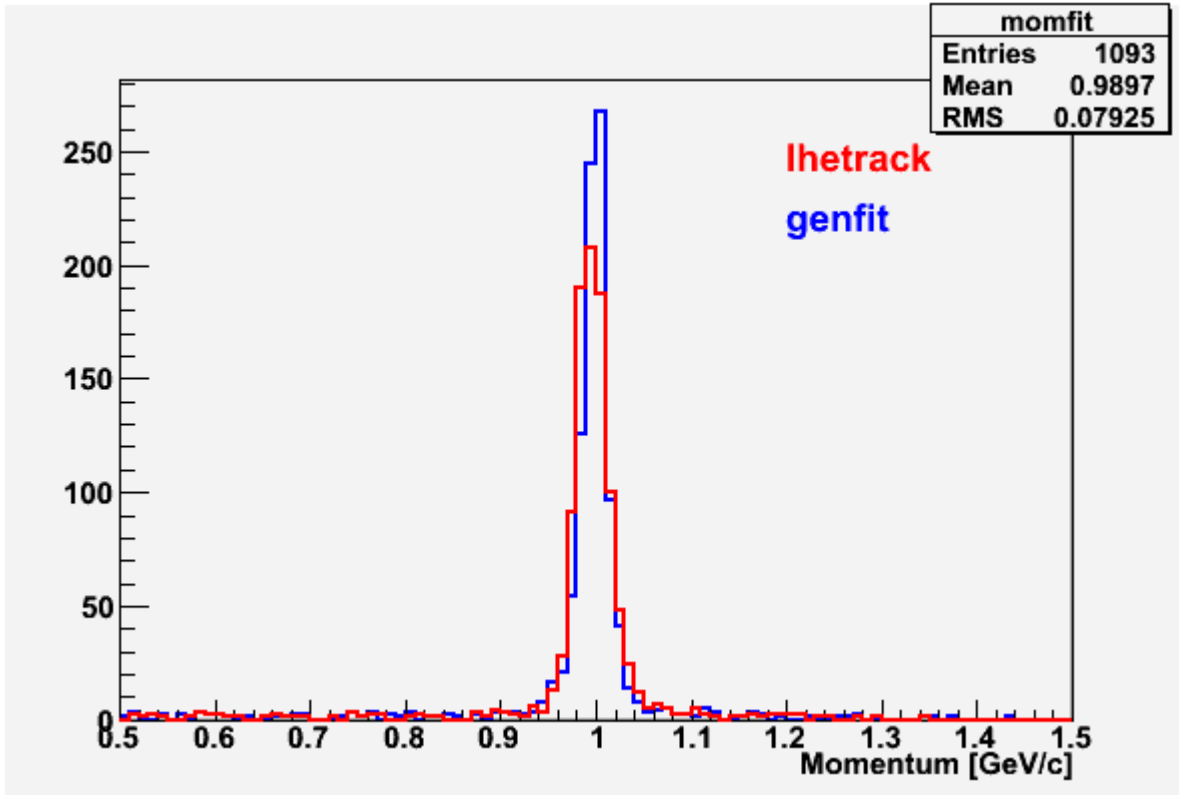
I will update the Torino tutorial macros in `pandaroot/tutorials/analysis`.

Thanks to Stefano.

Cheers, Ralf.

File Attachments

1) [1kpionsMvdTpcGem.png](#), downloaded 1054 times



2) [1kpionsMvdSttGem.png](#), downloaded 1100 times

