Subject: Bug in LHE (fixed) and MC propagation for tracks
Posted by StefanoSpataro on Tue, 12 Apr 2011 15:29:46 GMT
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Dear all,
first of all I want to communicate that the latest changes in the detectorID definition have introduced a bug in lhetrack code: GEMs were not working anymore (and this is the reason why for the data challenge LHE had poor efficiency at forward angles).
The bug has been found and fixed.

Second, I have extracted from lhetrack package the routine to correlate the PndTrack objects to all the PndMCTrack indices present in the track hits, and now it is a general task working with all the pattern recognition PndTrack objects. The task is called PndMCTrackAssociator, it creates a TClonesArray filled with PndTrackID objects (slide 2).

The macro/pid/run_reco_sttcombi.C shows how to use it after the reconstruction task:

```
PndMCTrackAssociator* trackMC = new PndMCTrackAssociator();
trackMC->SetTrackInBranchName("SttMvdGenTrack");
trackMC->SetTrackOutBranchName("SttMvdGenTrackID");
fRun->AddTask(trackMC);
```

and the run_pid_stt.C shows how to propagate the index of the most common PndMCTrack up to the PndPidCandidate:

```
PndPidCorrelator* corr = new PndPidCorrelator();
corr->SetInputBranch("SttMvdGenTrack");
corr->SetInputIDBranch("SttMvdGenTrackID");
corr->SetDebugMode(kTRUE);
fRun->AddTask(corr);
```

This is a temporary code, considering that FairLinks are commented out in the tpc code. Once fixed, we will move to the FairLink structure.