Subject: Bug in PndEmcHitProducer
Posted by Vanniarajan Suyam Jothi on Wed, 14 Apr 2010 09:00:41 GMT
View Forum Message <> Reply to Message

Hi,
  There was a probable problem in the PndEmcHitProducer observed.
The Energy deposited in the crystal from the PndEmcHit is fractionaly more than the energy sum from the PndEmcPoint
in the crystal.
  Mohammad Babai has found that there is a problem in the
following part of the PndEmcHitProducer::Exec() method.
the data entries of two maps fTrackEnergy and fTrackTime
are accessed un-initialised. Now He has fixed the
PndEmcHitProducer.

```
-----------------------------------------------------
 for (Int_t iPoint=0; iPoint<nPoints; iPoint++)
  {
    point = (PndEmcPoint*) fPointArray->At(iPoint);
    fTrackEnergy[point->GetDetectorID()] += point->GetEnergyLoss();
        point_time=point ->GetTime();
        if (point_time<fTrackTime[point->GetDetectorID()]) fTrackTime[point->GetDetectorID()]
=point_time;

        // Check and save MC truth information
        // Eloss==0 tracks are only stored in point, if track is entering detector from outside
        // and thats what we are interested in...
        if(point->GetEnergyLoss()==0){
              fTrackMcTruth[point->GetDetectorID()].push_back(point->GetTrackID());
// cout << "ELoss==0 : ID " <<
point->GetTrackID()<<","<<point->GetDetectorID()<<","<<point->GetXPad()
<<","<<point->GetYPad()<<endl;
        }
  }
```

Regards,
Vanni