
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 fractionally 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