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Subject: Re: Forward spectrometer tracking  
Posted by [donghee](#) on Thu, 04 Jun 2009 11:29:34 GMT  
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Dear Radek, Aleksandrma

I'm trying to give a contribution for the tracking of forward spectrometer.  
My task would be simple and a combining of mvd+gem+dch detectors as you can imagine.  
As a first step, I made a copy of your nice macro in the pandaroot macro/fwd  
/PndFwdPrepareKalmanTracks.cxx and /PndFwdKalmanTracks.cxx

I have a small question for the usage of the function RecoHitFactory::addProducer(detID, \*hitProd)  
To put certain hit producer module in this hit register, one needs to define or know detector ID.  
If I have a look for example GEM and DCH case, kGEM and kDCH can be found.  
Are these values kGEM and kDCH integers? Where are they initialized?  
I couldn't read kGEM and kDCH in both PndFwdKalmanTracks.cxx and PndFwdPrepareKalmanTracks.cxx, also in each header they are not defined if I have checked correctly.

Quote:

```
fTheRecoHitFactory->addProducer(kGEM,new  
RecoHitProducer<PndGemHit,PndGemRecoHit>(gemHitArray));
```

Second question is the conceptual design of PndFwdPrepareKalmanTracks::Exec().  
If I put mvd detector, the iteration must be starting from mvd, how do you think?

Quote:

```
std::cout << "Looping over " << nofGemTracks << " gem tracks" << endl;  
for (Int_t igemtr=0; igemtr<nofGemTracks; igemtr++){
```

My last question is for the understanding of PndPrepareKalmanTracks code.  
This code prepares a pattern recognition with many hits.  
The preparation has been started with GEM tracks, and then looking DCH tracks.  
At the end all hits (in GEM and DCH) distributions are used to build a track.  
If I want to use MVD, then do I have to make Mvd track also? because GEM and DCH has some kind of tracking container in this stage.  
or Do you think that I can use MVD hit without MVD track container during preparation?  
Do you have some idea?

Thank you for your time!  
Donghee Kang