Subject: Possibility of combining of digitization and reconstruction
Posted by donghee on Wed, 15 Apr 2009 13:21:41 GMT
View Forum Message <> Reply to Message

Dear all,

I'm looking for few references in pandaroot/macro/run/digi_complete.C and reco_complete.C

My funny idea is that some detector hits producers will be created the digitized hits and then directly use it at the track finding as a next step
All procedure will be performed in one macro.
To do that, simply two macros are merged into one.

Is it possible to combine these two macros?

Best wishes,
Donghee Kang

Subject: Re: Possibility of combining of digitization and reconstruction
Posted by Tobias Stockmanns on Wed, 15 Apr 2009 13:34:12 GMT
View Forum Message <> Reply to Message

Dear Donghee,

before you can use a digitized MVD hit in a kalman filter you have to reconstruct it.

Digitized data contains the output as it would be from the real experiment. For the MVD this is the information which module was hit, which front end and which pixel. In addition you get a time and deposited charge information.

This data has to be translated into a position in the coordinate system of the panda detector before it can be used in a tracking algorithm. This is the task of the reconstruction macro.

Cheers,

Tobias

Subject: Re: Possibility of combining of digitization and reconstruction
Posted by Ralf Kliemt on Wed, 15 Apr 2009 15:05:59 GMT
View Forum Message <> Reply to Message

Hello,

When it comes to the MVD I'd say you use the digitization and hit reconstruction in one macro:

```
  PndMvdDigiTask* mvddigi = new PndMvdDigiTask();
```

```
mvddigi->SetVerbose(iVerbose);
fRun->AddTask(mvddigi);

Double_t chargecut = 5000., pixelrad=1.8;
PndMvdClusterTask* mvdmccls = new PndMvdClusterTask(pixelrad,chargecut,inFile);
mvdmccls->SetVerbose(iVerbose);
fRun->AddTask(mvdmccls);
```

You can add other detectors tasks, as you like. I admit the overview situation is a bit messy right now.

Kind regards, Ralf.

Subject: Re: Possibility of combining of digitization and reconstruction
Posted by donghee on Thu, 16 Apr 2009 11:32:10 GMT
View Forum Message <> Reply to Message

Dear Ralf,

Thank you, it works properly.

Donghee