Subject: Re: GenaeTrackRep DetPlane
Posted by Anonymous Poster on Wed, 27 May 2009 10:12:14 GMT
View Forum Message <> Reply to Message

Hi,

hmm us bad kids writing in the forum during the PandaROOT meeting

Yes, I will have time in Torino. Maybe I can give you a little help even now. You can take a look to a class called StripHit.h,cxx} in genfit/benchmark.

I define a strip detector hit here, which is perpendicular to the z-axis. But changing this should be easy for you.

What you need to do:
- If it is 1D, you can leave the HMatrix like it is, if it is 2D, add another 1 at _HMatrix[0][4] = 0. Also you need to set the NParHitRep to 1 or 2 accordingly.

- make a contructor, that accepts an object of the class you use for representing the hit (a digi or so)

- in this constructor construct the DetPlane (which you then set with setDetPlane() after it is complete) so that the span vector U points along the coordinate which your detector measures (and V of course perpendicular to it, and it measures the second coordinate in case you have one) Of course also you have to define the origin of the plane.

- then you need to fill _hitCoord[i][j] and _hitCov[i][j]. If it is 1D, then hitCov is just sigma^2, if it is 2D, hitCoord has two entries and hitCov is a 2x2 matrix. Most likely you just set the diagonal to the sigma^2 of the projections. If there are correlations you can put them, and they will be used correctly.

If you have more questions, please ask.

Cheers, Christian