Subject: Re: Digitization and Reconstruction in Fairroot to new detectors
Posted by Raghav Kunnawalkam on Thu, 28 Jun 2012 14:57:49 GMT
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Hi Stefano

I am kinda confused as to where and how to define my read outs. For example say that i have a barrel tracker that is a cylinder from z = -10 to z = +10, with radius say 5 to 10 with all having the same units.

Now say that in the real world, my barrel tracker (Batr) has read outs every 1 unit in radius and 5 degree in theta and phi. So i have like a little section with
r = 5 to 6, and theta = 0 to 5 and phi = 0 to 5 inside which i cannot differentiate between hits.

I am very confused as to which class actually does my digitization. from my reading since yesterday and what you told i see that it is the hit along with hit producer that creates the data that i need.

I think that these are the steps that i need to follow, Please correct me if i am wrong.

1. First i create the following classes for my detector
   FairBatr.cxx, FairBatrContFact.cxx, FairBatrGeo.cxx, FairBatrGeoPar.cxx, FairBatrPoint.cxx, FairBatrHit.cxx, FairBatrHitProducer.cxx, FairBatrDigi.cxx, FairBatrDigiProducer.cxx, (if i want to do reco after this then i also add some more classes)
2. create the readouts in FairBatrHit, just like there are mdtdigibox and mdtdigistrip
3. Inside FairBatrHitProducer, in the Exec function do the actual digitization.
   this is exactly what i am confused about.
4. pretty much after part 2 i am confused.

Thanks a lot for all your help

Cheers
Raghav