Subject: How to get a volume path by id's
Posted by Ralf Kliemt on Tue, 19 Feb 2008 15:03:58 GMT
View Forum Message <> Reply to Message

Hello everybody,

I would like to get the complete path of a volume by its ID.
I have a simulation file containing the CBMGeom and a branch with CbmMCPoints. There is a reference to the detectors via the GetDetectorID() method.
I could get a volume by TGeoVolume* vol = geoMan->GetVolume(detid); but when calling for the vol->GetName(); I just get one name and not the complete Path:
Quote:"NewLayer3oHalfBarrel"

instead of

/cave_1/MVDoOption1_0/NewLayer3oHalfBarrel_1/NewLayer3Stave_2/Moduleo4FE_1/FullSensoro4FE_1/SensorActiveAreao[NrFE=4]oPartAss_1/SensorActiveArea o[NrFE=4]_1
Now I'm somehow lost inbetween the geometry classes.

In fact for the MVD there is an additional string stored in the PndMvdMCPoint. Is this because cbmsoft does not store the full path via the volume ID?

Kind regards, Ralf.

Subject: Re: How to get a volume path by id's
Posted by Pablo Genova on Tue, 19 Feb 2008 15:40:33 GMT
View Forum Message <> Reply to Message

Hi Ralf,

I only know that with

gMC->CurrentVolPath()

you can call the "basic" virtualmontecarlo routine that should give you the FULL path of the volume in which you are.

I used it in the past, if I remember correctly...

I do not know if there are other ways....

Tschuess, Pablo

Subject: Re: How to get a volume path by id's
Posted by Tobias Stockmanns on Wed, 20 Feb 2008 07:42:04 GMT
View Forum Message <> Reply to Message

Hi Ralf,

you are right. I have introduced the additional string in PndMvdMCPoint to store the (encoded) full path of a detector hit. Another way to get the volume which was hit is by the function geoManager->FindNode(x,y,z).

Take the pos and posOut position and calculate the mean of these two . With this position you can use FindNode to give you the node of your volume.

Cheers,

Tobias