Subject: Geometry file for Dch at simulation
Posted by donghee on Fri, 22 May 2009 17:20:40 GMT
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Dear DCH expert,

I'm working with Pandaroot version 5476,
I have a trouble to use or access dch.root geometry file.
If I'm going to dch.root, simulation script doesn't work any more.
If I use dch.geo, script is running, but in the digi and reco part I got an error message like this,
"Empty geometry passed to PndDchStructure"
I guess that Dch detector couldn't be loaded at simulation part.
Is there a simple solution to fix it?

Quote:
```
FairDetector *Dch = new PndDchDetector("DCH", kTRUE);
Dch->SetGeometryFileName("dch.root");
Dch->SetVerboseLevel(1);
fRun->AddModule(Dch);
```

Best wishes,
Donghee

Subject: Re: Geometry file for Dch at simulation
Posted by donghee on Fri, 22 May 2009 23:55:01 GMT
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Dear Dch and Dirc expert,

I'm now trying to understand why geometry dch.root cannot be loaded?
I found very strange feature with Dch and Drc class.
If I try to put this two module in one macro, it would be failed.
Because I could not access dch.root, or maybe there is some other reason, I don't know what happen with inside.
But If I turn off Dirc, then I can use dch.root and everything looks fine! I think Dirc and Dch cannot simulataneously use in this case.
Dirc expert show their example code without Dirc everytime,
therefore you don't have any problem with the macros in the /macro/dirc/*.

Alternatively, If I use geometry file dch.geo, then dirc can also add in the task.
When dch.root is produced, probably some geometry is overlapped and the problem is only appeared with dch.root file.

Regards,
Donghee

Quote:

```
PndDrc *Drc = new PndDrc("DIRC", kTRUE);
Drc->SetRunCherenkov(kFALSE); // for fast sim Cherenkov -> kFALSE
fRun->AddModule(Drc);

FairDetector *Dch = new PndDchDetector("DCH", kTRUE);
Dch->SetGeometryFileName("dch.root");
//Dch->SetGeometryFileName("dch.geo");
Dch->SetVerboseLevel(1);
fRun->AddModule(Dch);
```

Subject: Re: Geometry file for Dch at simulation
Posted by StefanoSpataro on Sat, 23 May 2009 06:30:09 GMT
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Could you please write exactly which macro are you using?
I know that dch is overlapping with old mdt, and that there could be problems of dch maybe with the old solenoid.
However, dch.root should be the good one, the .geo is rather old and it should not be valid anymore.

Subject: Re: Geometry file for Dch at simulation
Posted by donghee on Sat, 23 May 2009 09:39:40 GMT
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Dear Stefano,

Thank you for your kind help in every time, even though it is weekend.

If I use dch.geo, I couldn't have any reasonable output.
You are correct. I'm using now dch.root without Dirc part.
Because if I add Dirc, I cannot do continue.
You also mentioned, probably MDT should be something wrong.
I have to check which combination will work!

Now main issue in this time is that how can I run with
MDT, Dirc, Dch and Gem detector

You can find my scripts for MC simulation.
Up to now, I didn't try the GEM, DCH and in addition MDT.
I have successively produced MC study files with Magnet, Cave, TPC, Mvd, EMC, Dirc, Tof based on the lhetracking macro.
But I want to put two stuff, namely GEM and DCH as a tracking of forward spectrometer. The guide macro for this two stuffs are macro/gem and macro/dch.

I have modified many thing to use GEM and DCH modules.
I try to introduce in my macro following things.

In run, I add GEM(4 stataions), DCH and MDT detectors.
And in digi I produce ideal hit or digi.
Finally, in reco I will perform some kind of kalman fit as showed in example macros.

More news will be come...

Thank you again,
Donghee

File Attachments

1) My_dvcs_full_run.C, downloaded 501 times
2) My_dvcs_full_digi.C, downloaded 501 times
3) My_dvcs_full_reco.C, downloaded 502 times