
Subject: Bug in DIRC with geant4
Posted by [StefanoSpataro](#) on Tue, 05 Jul 2011 11:36:28 GMT
[View Forum Message](#) <> [Reply to Message](#)

I am using the following DIRC initialization:

```
PndDrc *Drc = new PndDrc("DIRC", kTRUE);  
Drc->SetGeometryFileName("dirc_l0_p0.root");  
Drc->SetRunCherenkov(kFALSE); // for fast sim Cherenkov -> kFALSE  
fRun->AddModule(Drc);
```

It seems to work with Geant3, but with geant4 I have the following crash:

```
Info in <TG4RootNavMgr::Initialize>: Creating G4 hierarchy ...  
Info in <TGeoManager::ConvertReflections>: Converting reflections in: FAIRGeom - FAIR  
geometry ...  
Info in <TGeoManager::ConvertReflections>: Done  
==> GEANT4 materials created and mapped to TGeo ones...  
Cannot make material for volume: BarrelDIRC  
Aborting in CreateLogicalVolume()
```

```
*** G4Exception: Aborting execution ***
```

A fix is required, I suppose.

Subject: Re: Bug in DIRC with geant4
Posted by [Maria Patsyuk](#) on Tue, 05 Jul 2011 16:02:17 GMT
[View Forum Message](#) <> [Reply to Message](#)

This bug should be already fixed.
Try to update the geometry directory or just the dirc_l0_p0.root file.

Subject: Re: Bug in DIRC with geant4
Posted by [StefanoSpataro](#) on Tue, 05 Jul 2011 16:15:12 GMT
[View Forum Message](#) <> [Reply to Message](#)

I have just tried with the latest trunk but it crashes again.

Subject: Re: Bug in DIRC with geant4
Posted by [Maria Patsyuk](#) on Tue, 05 Jul 2011 20:13:23 GMT
[View Forum Message](#) <> [Reply to Message](#)

to run the simulation correctly please make the following changes in the gconfig/g4Config.C file:

instead of

```
TG4RunConfiguration* runConfiguration = new TG4RunConfiguration("geomRoot",  
"QGSP_BERT_EMV+optical", "stepLimiter+specialCuts+specialControls");
```

use

```
TG4RunConfiguration* runConfiguration = new TG4RunConfiguration("geomRootToGeant4",  
"QGSP_BERT_EMV+optical", "stepLimiter+specialCuts+specialControls");
```

Hope this helps
