
Subject: URGENT: Dirc geometry?

Posted by [Stefano Spataro](#) on Thu, 26 May 2011 07:41:25 GMT

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Hi,
which is the proper way to run DIRC geometry?
I am using the old good standard:

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

But it is not working, it produces the following messages:

```
===== DRC:: ConstructOpticalGeometry() =====  
Warning in <TGeant3TGeo::DefineOpSurface>: Called for surface MirrSurface. Not applicable  
in Geant3 - setting is ignored.  
Warning in <TGeant3TGeo::SetBorderSurface>: Called for border surface BarMirrSurface. Not  
applicable in Geant3 - setting is ignored.  
Warning in <TGeant3TGeo::SetBorderSurface>: Called for border surface BarMirrSurface. Not  
applicable in Geant3 - setting is ignored.  
Warning in <TGeant3TGeo::SetBorderSurface>: Called for border surface BarMirrSurface. Not  
applicable in Geant3 - setting is ignored.  
Warning in <TGeant3TGeo::SetBorderSurface>: Called for border surface BarMirrSurface. Not  
applicable in Geant3 - setting is ignored.  
Warning in <TGeant3TGeo::SetBorderSurface>: Called for border surface BarMirrSurface. Not  
applicable in Geant3 - setting is ignored.  
Warning in <TGeant3TGeo::SetMaterialProperty>: Called for material surface MirrSurface.  
Not applicable in Geant3 - setting is ignored.  
===== DRC::ConstructOpGeometry -> Finished! =====  
-I- Initializing PndSdsDetector()
```

```
*****
```

```
PndEmc::SetSpecialPhysicsCuts():  
using special physics cuts ...
```

```
*****
```

```
-I- Initializing PndGemDetector()  
-I- PndDrc: Initialization started...  
-I- PndDrc: Switching OFF Cherenkov Propagation  
Volld: Volume DrcBarSensor not found  
bar 1 id = 0  
Volld: Volume DrcPDSensor not found  
Volld: Volume DrcBarBox not found  
Volld: Volume DrcEV not found  
-I- PndDrc: Initialization successfull
```

but in the TGeoManager I can see there is no DIRC!!
Which is the correct way to call it? I do not need the cherenkov propagation, the fast option is
what I need to use.

Many thanks in advance.

Subject: Re: URGENT: Dirc geometry?
Posted by [Maria Patsyuk](#) on Thu, 26 May 2011 09:42:38 GMT
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The proper way to run DIRC geometry is the following:

```
Drc->SetRunCherenkov(kTRUE);  
Drc->SetGeometryFileName("dirc_I0_p0.root");  
fRun->AddModule(Drc);
```

(see trunk/macro/drc/sim_dirc.C)

And those warnings when you run the DIRC simulation with geant3 are harmless, in geant4 they disappear.

Hope this helps.

Subject: Re: URGENT: Dirc geometry?
Posted by [Stefano Spataro](#) on Thu, 26 May 2011 10:26:41 GMT
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Ehm,
when was it changed exactly? I do not remember any announcement.
Just to understand since when we have no DIRC in simulation.

Subject: Re: URGENT: Dirc geometry?
Posted by [Maria Patsyuk](#) on Thu, 26 May 2011 10:32:55 GMT
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The Barrel DIRC geometry is in the .root file in trunk/geometry/dirc_I0_p0.root since 2 weeks.

I did not do any announcements except of comments when committing the changes to the svn.
Should I have created a topic in the forum too?

Subject: Re: URGENT: Dirc geometry?
Posted by [Stefano Spataro](#) on Thu, 26 May 2011 10:53:44 GMT
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In theory an announcement could be good
However, now that I know it, I will update the "default" macros according to.
Thanks for the fast reply.

Subject: Re: URGENT: Dirc geometry?

Posted by [Maria Patsyuk](#) on Thu, 26 May 2011 10:58:30 GMT

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I'll inform the PANDARoot-ers the next time.

Sorry for misleading.

To run the DIRC now you need an updated trunk/drc, trunk/geometry and trunk/macro/drc directories.

Best regards,
Maria

Subject: Re: URGENT: Dirc geometry?

Posted by [Stefano Spataro](#) on Thu, 26 May 2011 12:25:01 GMT

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Is it possible to set Cherenkov kFALSE, in order to not have the full cherenkov propagation and to be faster?

Subject: Re: URGENT: Dirc geometry?

Posted by [Maria Patsyuk](#) on Thu, 26 May 2011 13:01:31 GMT

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I think so, if you don't want to have any photons.
I've never tried though.
