Posted by Olaf Hartmann on Mon, 23 Jan 2012 10:31:13 GMT
View Forum Message <> Reply to Message

Dear all,

I've noticed that the DIRC is missing in my simulation; in fact there is an error message. I load the following in the macro:

  PndDrc *Drc = new PndDrc("DIRC", kFALSE);
  Drc->SetRunCherenkov(kFALSE);
  fRun->AddModule(Drc);

Then, ROOT tells me:

  ======= DRC:: ConstructGeometry() =======
  ===
Geometry format not supported!
  ===
Warning in <TGeoVolume::AddNode>: Volume cave : added node DskBase_1 with same name

and the "usual" warnings from ConstructOpticalGeometry()

Anybody has a comment to this?

Cheers
Olaf.

Subject: Re: problem with DIRC geometry (TGeant3) ?
Posted by StefanoSpataro on Mon, 23 Jan 2012 10:34:00 GMT
View Forum Message <> Reply to Message

You are using an old macro. Check new macro/pid/run_sim_xxx.C

Subject: Re: problem with DIRC geometry (TGeant3) ?
Posted by Olaf Hartmann on Mon, 23 Jan 2012 10:46:46 GMT
View Forum Message <> Reply to Message

My macro is new, just the DRC part was old
However it's a bit annoying that for each detector I have look through all the corresponding macros to find a recent and complete version ...

Subject: Re: problem with DIRC geometry (TGeant3) ?
Posted by StefanoSpataro on Mon, 23 Jan 2012 11:25:37 GMT
View Forum Message <> Reply to Message

The standard macros are in macro/pid since years

Subject: Re: problem with DIRC geometry (TGeant3) ?
Posted by Maria Patsyuk on Mon, 23 Jan 2012 12:09:29 GMT
View Forum Message <> Reply to Message

Please add the following line to the macro:

Drc->SetGeometryFileName("dirc_l0_p0_updated.root");

this geometry file is in geometry/ directory.

Subject: Re: problem with DIRC geometry (TGeant3) ?
Posted by StefanoSpataro on Mon, 23 Jan 2012 15:53:55 GMT
View Forum Message <> Reply to Message

Done!

Subject: Re: problem with DIRC geometry - now TGeant4
Posted by Olaf Hartmann on Mon, 27 Feb 2012 10:09:07 GMT
View Forum Message <> Reply to Message

Hi Maria,

I just realized that with

Drc->SetGeometryFileName("dirc_l0_p0_updated.root");

I cannot build the geometry with Geant4 (jan12):

Quote:
===> GEANT4 materials created and mapped to TGeo ones...

-------- EEEE ------- G4Exception-START -------- EEEE -------
*** G4Exception : G4Root_F003
    issued by : TG4RootDetectorConstruction::CreateG4LogicalVolume
    Cannot make material for volume: BarrelDIRC

*** Fatal Exception *** core dump ***
-------- EEEE -------- G4Exception-END --------- EEEE -------

*** G4Exception: Aborting execution ***

Do you now what's the problem here? I updated already the DRC and geometry directory.

Cheers
Olaf.

Subject: Re: problem with DIRC geometry - now TGeant4
Posted by Maria Patsyuk on Mon, 27 Feb 2012 10:18:47 GMT
View Forum Message <> Reply to Message

Dear Olaf,

actually I did not come across such problem.

if it is possible, I'll try to solve it as soon as I'm back at GSI in the middle of March?
If you need it right now, I'll try to fix it right now.

Maria

Subject: Re: problem with DIRC geometry - now TGeant4
Posted by Maria Patsyuk on Mon, 27 Feb 2012 10:21:07 GMT
View Forum Message <> Reply to Message

please make sure you've changed the g4config.C as in mine
(/u/mpatsyuk/PANDA/trunk/gconfig/g4Config.C)

Subject: Re: problem with DIRC geometry - now TGeant4
Posted by Olaf Hartmann on Mon, 27 Feb 2012 10:36:53 GMT
View Forum Message <> Reply to Message

Hi Maria,

thanks,

Maria Patsyuk wrote on Mon, 27 February 2012 11:21please make sure you've changed the
g4config.C as in mine (/u/mpatsyuk/PANDA/trunk/gconfig/g4Config.C)

helped to cure the error before, but now I encounter the next one:

Converting Root geometry to Geant4 via VGM ...
/misc/cbmsoft/Lenny64/jan12/fairsoft/bin/root.exe: symbol lookup error:
/misc/cbmsoft/Lenny64/jan12/fairsoft/lib/libRootGM.so: undefined symbol:
_ZN6RootGM14DisplacedSolidC1EP8TGeoBBox

This looks like an internal problem in Root?

Olaf.

Subject: Re: problem with DIRC geometry - now TGeant4
Posted by Maria Patsyuk on Mon, 27 Feb 2012 13:20:46 GMT
View Forum Message <> Reply to Message

yes, this problem looks new to me.
Actually we have also other unsolved problems (caused by root) with jan12 packages so I
would recommend you to use the older ones to run the DIRC simulation.

Subject: Re: problem with DIRC geometry - now TGeant4
Posted by Florian Uhlig on Mon, 27 Feb 2012 14:41:40 GMT
View Forum Message <> Reply to Message

Hi Olaf,

could you please try again at GSI Lenny64. I found out that we missed to compile some new
files. I fixed it now for the following SIMPATH /misc/cbmsoft/Lenny64/jan12/fairsoft/

Now it should work.

Ciao

Florian

Subject: Re: problem with DIRC geometry - now TGeant4
Posted by Olaf Hartmann on Mon, 27 Feb 2012 14:52:07 GMT
View Forum Message <> Reply to Message

Hi Florian,

I just tried it, and the previous reported error is gone. However it still does not work:

Quote:Converting Root geometry to Geant4 via VGM ...

-------- EEEE ------- G4Exception-START -------- EEEE -------
*** G4Exception : GeomSolids0002
    issued by : G4Polycone::G4Polycone()
Cannot create a Polycone with no contiguous segments.
    Segments are not contiguous !
    rMin[3] = 45 -- rMax[4] = 31
    rMin[4] = 30 -- rMax[3] = 46
*** Fatal Error In Argument *** core dump ***

-------- EEEE -------- G4Exception-END --------- EEEE -------

*** G4Exception: Aborting execution ***

Which looks again like a problem in the geometry.

Cheers
Olaf.

Subject: Re: problem with DIRC geometry - now TGeant4
Posted by Florian Uhlig on Mon, 27 Feb 2012 15:13:22 GMT
View Forum Message <> Reply to Message

Hi Olaf,

I agree that the error looks more like a problem of the geometry. It looks like that the vgm conversion starts correctly. Since I don't know anything about the DIRC geometry I can not help here.

Ciao

Florian

Subject: Re: problem with DIRC geometry - now TGeant4
Posted by Maria Patsyuk on Fri, 23 Mar 2012 14:52:22 GMT
View Forum Message <> Reply to Message

Hi Olaf,

I could not reproduce your error Quote:Converting Root geometry to Geant4 via VGM ...

-------- EEEE ------- G4Exception-START -------- EEEE -------
*** G4Exception : GeomSolids0002
issued by : G4Polycone::G4Polycone()
Cannot create a Polycone with no contiguous segments.
Segments are not contiguous !
rMin[3] = 45 -- rMax[4] = 31
rMin[4] = 30 -- rMax[3] = 46
*** Fatal Error In Argument *** core dump ***
-------- EEEE -------- G4Exception-END --------- EEEE -------

*** G4Exception: Aborting execution ***
 with Jan2012 packages.
Maybe we could meet to study the problem in more details or something like this, if this problem is still actual for you?

By the way, I don't know why you need the DIRC simulation for, we don't use the Jan2012 packages for the events simulation because the detector response is not quite ok with them.

Best regards,
Maria

Subject: Re: problem with DIRC geometry - now TGeant4
Posted by StefanoSpataro on Fri, 23 Mar 2012 20:58:03 GMT
View Forum Message <> Reply to Message

Maria Patsyuk wrote on Fri, 23 March 2012 15:52By the way, I don't know why you need the DIRC simulation for, we don't use the Jan2012 packages for the events simulation because the detector response is not quite ok with them.

Well, the DIRC is material budget, interacts with particles and produces secondaries. And we can use the fast mode to have smeared values for fast particle identification.