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Subject: break segm,antation with geant4  
Posted by [asanchez](#) on Tue, 11 Mar 2008 17:01:23 GMT  
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Dear all,  
i'm trying to run my simulation and digitization macro  
with geant4. It has been running one week ago, now i'm trying with a new geometry file .geo  
and it seems not work properly when i run the digitization, whereas with geant3 it does.

Has it anything been changed at /cbmssoft/Debian3.1/development?

ALicia

that is my output

```
ot > .q
lxr007:hyp>root sim_hypTest.C -I
root [0]
Processing sim_hypTest.C...
```

PSaid instance created... access via gSaid->f()

- RTDB container factory CbmBaseContFact
- RTDB container factory PndFieldContFact
- RTDB container factory PndPassiveContFact
- RTDB container factory PndTpcContFact
- RTDB container factory PndHypContFact
- I- CbmRun::SetMaterials() Media file used:  
/d/panda02/asanchez/fairroot\_newPack/pandaroot/geometry/media\_pnd.geo
- I CbmAsciiGenerator: Opening input file ximinAsciiStpRate.dat

```
===== CbmRunSim: Initialising simulation run =====
Info in <TGeoManager::TGeoManager>: Geometry CBMGeom, CBM geometry created
-I- CbmGeoMedia Read media
Loading Geant4 granular libraries ...
Loading VGM libraries ...
Loading libraries ... finished
Info in <TGeoManager::SetTopVolume>: Top volume is cave. Master volume is cave
Info in <TGeoManager::CheckGeometry>: Fixing runtime shapes...
Info in <TGeoManager::CheckGeometry>: ...Nothing to fix
Info in <TGeoManager::CloseGeometry>: Counting nodes...
Info in <TGeoManager::Voxelize>: Voxelizing...
Info in <TGeoManager::CloseGeometry>: Building cache...
Info in <TGeoNavigator::BuildCache>: --- Maximum geometry depth set to 100
Info in <TGeoManager::CloseGeometry>: 247 nodes/ 247 volume UID's in CBM geometry
Info in <TGeoManager::CloseGeometry>: -----modeler ready-----
Info in <TG4RootNavMgr::SetNavigator>: TG4RootNavigator created and registered to
G4TransportationManager
Running TVirtualMCApplication::ConstructGeometry
*****
```

Geant4 version Name: geant4-09-00 (29-June-2007)
Copyright : Geant4 Collaboration
Reference : NIM A 506 (2003), 250-303

```
*****  
Info in <TG4RootNavMgr::Initialize>: Creating G4 hierarchy ...  
Info in <TGeoManager::ConvertReflections>: Converting reflections in: CBMGeom - CBM  
geometry ...  
Info in <TGeoManager::ConvertReflections>: Done  
====> GEANT4 materials created and mapped to TGeo ones...  
====> GEANT4 physical volumes created and mapped to TGeo hierarchy...  
### INFO: TG4RootDetectorConstruction::Construct() finished  
TG4PostDetConstruction::Initialize  
G4 Stat: instantiated 247 logical volumes  
          246 physical volumes  
Info in <TG4RootNavMgr::ConnectToG4>: ROOT detector construction class connected to  
G4RunManager  
Adding HadronPhysicsList QGSP_BERT
```

```
<<< Geant4 Physics List engine packaging library: PACK 5.3  
<<< Geant4 Physics List simulation engine: QGSP_BERT 3.3
```

```
Adding SpecialPhysicsList  
Debug mode is switched on.  
Visualization Manager instantiating...  
Visualization Manager initialising...  
Registering graphics systems...
```

You have successfully registered the following graphics systems.  
Current available graphics systems are:

```
ASCIITree (ATree)  
DAWNFILE (DAWNFILE)  
G4HepRepFile (HepRepFile)  
G4HepRep (HepRepXML)  
RayTracer (RayTracer)  
VRML1FILE (VRML1FILE)  
VRML2FILE (VRML2FILE)  
OpenGLImmediateX (OGLIX)  
OpenGLStoredX (OGLSX)  
OpenGLImmediateXm (OGLIXm)  
OpenGLStoredXm (OGLSXm)
```

Registering model factories...

You have successfully registered the following model factories.  
Registered model factories:  
drawByCharge  
drawByParticleID

Registered filter factories:

None

Geant4 has been created.  
-I g4Config() using g4conf macro:

```

/d/panda02/asanchez/fairroot_newPack/pandaroot/gconfig/g4config.in
Physics cuts with script
/d/panda02/asanchez/fairroot_newPack/pandaroot/gconfig/SetCuts.C
### Adding Neutron tracking cut for neutron
### cut value is 10 microseconds
### Hadron physics constructed.
### Processes mapped to VMC controls ok.
### Special Cuts constructed.
### Step limiter physics constructed.
### User particles physics constructed.
### Processes mapped to VMC codes ok.
-I- CbmMCAApplication -> simulation RunID: 1582060455

```

\*\*\*\*\*

GEANT4 Geometry statistics:  
 247 logical volumes  
 246 physical volumes  
 5 materials  
 5 user limits  
 247 sensitive detectors

\*\*\*\*\*

```

-I- CbmMCAApplication:: Monte carlo Engine Initialisation with TGeant4
-I- PndFieldMap: Reading field map from ROOT file
/d/panda02/asanchez/fairroot_newPack/pandaroot/input/TransMap.root
-I- PndFieldMap: Reading field map from ROOT file
/d/panda02/asanchez/fairroot_newPack/pandaroot/input/DipoleMap.root
-I- PndFieldMap: Reading field map from ROOT file
/d/panda02/asanchez/fairroot_newPack/pandaroot/input/SolenoidMap.root
RuntimeDb: write container CbmBaseParSet
*** CbmBaseParSet written to ROOT file version: 25
RuntimeDb: write container PndGeoPassivePar
*** PndGeoPassivePar written to ROOT file version: 25
RuntimeDb: write container PndGeoHypPar
*** PndGeoHypPar written to ROOT file version: 25
-----
```

----- actual containers in runtime database -----

CbmBaseParSet	Test class for parameter io
PndGeoPassivePar	Passive Geometry Parameters
PndGeoHypPar	Hyp Geometry Parameters

----- runs, versions -----

run id

container	1st-inp	2nd-inp	output
run: 1582060455			
CbmBaseParSet	1582060455	-1	25
PndGeoPassivePar	1582060455	-1	25
PndGeoHypPar	1582060455	-1	25

----- input/output -----

first input: none  
 second input: none  
 output:

OBJ: CbmParRootFile simparams.root : 0 at: 0xa4c8d18

Root file I/O simparams.root is open  
detector I/Os: CbmGenericParlo

phot: Total cross sections from Sandia parametrisation.  
Sampling according PhotoElectric model

compt: Total cross sections has a good parametrisation from 10 KeV to (100/Z) GeV  
Sampling according Klein-Nishina model  
tables are built for gamma  
Lambda tables from 100 eV to 100 GeV in 90 bins.

conv: Total cross sections has a good parametrisation from 1.5 MeV to 100 GeV for all Z;  
sampling secondary e+e- according Bethe-Heitler model  
tables are built for gamma  
Lambda tables from 1.022 MeV to 100 GeV in 100 bins.

msc: Model variant of multiple scattering for e-  
Lambda tables from 100 eV to 100 TeV in 120 bins.  
LateralDisplacementFlag= 1 Skin= 0  
Boundary/stepping algorithm is active with RangeFactor= 0.02 Step limit type 1

eloni: tables are built for e-  
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.  
Lambda tables from threshold to 100 TeV in 120 bins.  
Delta cross sections and sampling from MollerBhabha model  
Good description from 1 KeV to 100 GeV.  
Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1

eBrem: tables are built for e-  
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.  
Lambda tables from threshold to 100 TeV in 120 bins.  
Total cross sections and sampling from StandBrem model (based on the EEDL data library)  
Good description from 1 KeV to 100 GeV, log scale extrapolation above 100 GeV. LPM flag 1

eloni: tables are built for e+  
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.  
Lambda tables from threshold to 100 TeV in 120 bins.  
Delta cross sections and sampling from MollerBhabha model  
Good description from 1 KeV to 100 GeV.  
Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1

eBrem: tables are built for e+  
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.  
Lambda tables from threshold to 100 TeV in 120 bins.  
Total cross sections and sampling from StandBrem model (based on the EEDL data library)  
Good description from 1 KeV to 100 GeV, log scale extrapolation above 100 GeV. LPM flag 1

annihil: Sampling according eplus2gg model

tables are built for e+  
Lambda tables from 100 eV to 100 TeV in 120 bins.

msc: Model variant of multiple scattering for proton  
Lambda tables from 100 eV to 100 TeV in 120 bins.  
LateralDisplacementFlag= 1 Skin= 0  
Boundary/stepping algorithm is active with RangeFactor= 0.2 Step limit type 0

hloni: tables are built for proton  
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.  
Lambda tables from threshold to 100 TeV in 120 bins.  
Scaling relation is used from proton dE/dx and range.  
Delta cross sections and sampling from BetheBloch model for scaled energy > 2 MeV  
Parametrisation from Bragg for protons below.  
Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1

msc: Model variant of multiple scattering for Genericlon  
LateralDisplacementFlag= 0 Skin= 0  
Boundary/stepping algorithm is active with RangeFactor= 0.2 Step limit type 1

ionloni: tables are built for Genericlon  
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.  
Lambda tables from threshold to 100 TeV in 120 bins.  
Scaling relation is used from proton dE/dx and range.  
Delta cross sections and sampling from BetheBloch model for scaled energy > 2 MeV  
Parametrisation from Bragg for protons below. NuclearStopping 1

Stopping Power data for 8 ion/material pairs are used.  
Step function: finalRange(mm)= 0.1, dRoverRange= 0.1, integral: 1

hloni: tables are built for anti\_proton  
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.  
Lambda tables from threshold to 100 TeV in 120 bins.  
Scaling relation is used from proton dE/dx and range.  
Delta cross sections and sampling from BetheBloch model for scaled energy > 2 MeV  
Parametrisation from Bragg for protons below.  
Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1

msc: Model variant of multiple scattering for mu+  
Lambda tables from 100 eV to 100 TeV in 120 bins.  
LateralDisplacementFlag= 1 Skin= 0  
Boundary/stepping algorithm is active with RangeFactor= 0.2 Step limit type 0

muloni: tables are built for mu+  
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.  
Lambda tables from threshold to 100 TeV in 120 bins.  
Bethe-Bloch model for E > 0.2 MeV, parametrisation of Bragg peak below,  
radiative corrections for E > 1 GeV  
Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1

muBrems: tables are built for mu+  
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Parametrised model

muPairProd: tables are built for mu+

dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Parametrised model

muloni: tables are built for mu-

dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Bether-Bloch model for E > 0.2 MeV, parametrisation of Bragg peak below, radiative corrections for E > 1 GeV

Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1

muBrems: tables are built for mu-

dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Parametrised model

muPairProd: tables are built for mu-

dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Parametrised model

G4UHadronElasticProcess for neutron PDGcode= 2112 Elow(MeV)= 19 Elowest(eV)= 0

hloni: tables are built for pi+

dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Scaling relation is used from proton dE/dx and range.

Delta cross sections and sampling from BetheBloch model for scaled energy > 0.297504 MeV

Parametrisation from Bragg for protons below.

Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1

msc: Model variant of multiple scattering for pi-

Lambda tables from 100 eV to 100 TeV in 120 bins.

LateralDisplacementFlag= 1 Skin= 0

Boundary/stepping algorithm is active with RangeFactor= 0.2 Step limit type 0

hloni: tables are built for pi-

dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Scaling relation is used from proton dE/dx and range.

Delta cross sections and sampling from BetheBloch model for scaled energy > 0.297504 MeV

Parametrisation from Bragg for protons below.

Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1

===== Table of registered couples =====

Index : 0 used in the geometry : Yes recalculation needed : No

Material : air

Range cuts : gamma 1 mm e- 1 mm e+ 1 mm

Energy thresholds : gamma 990 eV e- 990 eV e+ 990 eV

Region(s) which use this couple :

DefaultRegionForTheWorld

Index : 1 used in the geometry : Yes recalculation needed : No

Material : vacuum

Range cuts : gamma 1 mm e- 1 mm e+ 1 mm

Energy thresholds : gamma 990 eV e- 990 eV e+ 990 eV

Region(s) which use this couple :

DefaultRegionForTheWorld

Index : 2 used in the geometry : Yes recalculation needed : No

Material : HYPdiamond

Range cuts : gamma 1 mm e- 1 mm e+ 1 mm

Energy thresholds : gamma 3.86474 keV e- 791.969 keV e+ 763.254 keV

Region(s) which use this couple :

DefaultRegionForTheWorld

Index : 3 used in the geometry : Yes recalculation needed : No

Material : HYPsilicon

Range cuts : gamma 1 mm e- 1 mm e+ 1 mm

Energy thresholds : gamma 6.88731 keV e- 540.718 keV e+ 521.113 keV

Region(s) which use this couple :

DefaultRegionForTheWorld

Index : 4 used in the geometry : Yes recalculation needed : No

Material : HYPcarbon

Range cuts : gamma 1 mm e- 1 mm e+ 1 mm

Energy thresholds : gamma 3.29462 keV e- 568.011 keV e+ 554.196 keV

Region(s) which use this couple :

DefaultRegionForTheWorld

=====

### Run 0 start.

-I CbmAsciiGenerator: Event 1, vertex = (0,0,-76.5) cm, multiplicity 1

-I CbmPrimaryGenerator: 1 primary tracks from vertex (0, 0, 0)

>>> Event 0

>>> End of Event 0

-I CbmAsciiGenerator: Event 2, vertex = (0,0,-76.5) cm, multiplicity 1

-I CbmPrimaryGenerator: 1 primary tracks from vertex (0, 0, 0)

>>> Event 1

>>> End of Event 1

-I CbmAsciiGenerator: Event 3, vertex = (0,0,-76.5) cm, multiplicity 1

-I CbmPrimaryGenerator: 1 primary tracks from vertex (0, 0, 0)

>>> Event 2

```
>>> End of Event 2
-I CbmAsciiGenerator: Event 4, vertex = (0,0,-76.5) cm, multiplicity 1
-I CbmPrimaryGenerator: 1 primary tracks from vertex (0, 0, 0)
>>> Event 3

>>> End of Event 3
-I CbmAsciiGenerator: Event 5, vertex = (0,0,-76.5) cm, multiplicity 1
-I CbmPrimaryGenerator: 1 primary tracks from vertex (0, 0, 0)
>>> Event 4

>>> End of Event 4
-I CbmAsciiGenerator: Event 6, vertex = (0,0,-76.5) cm, multiplicity 1
-I CbmPrimaryGenerator: 1 primary tracks from vertex (0, 0, 0)
>>> Event 5

>>> End of Event 5
-I CbmAsciiGenerator: Event 7, vertex = (0,0,-76.5) cm, multiplicity 1
-I CbmPrimaryGenerator: 1 primary tracks from vertex (0, 0, 0)
>>> Event 6

>>> End of Event 6
-I CbmAsciiGenerator: Event 8, vertex = (0,0,-76.5) cm, multiplicity 1
-I CbmPrimaryGenerator: 1 primary tracks from vertex (0, 0, 0)
>>> Event 7

>>> End of Event 7
-I CbmAsciiGenerator: Event 9, vertex = (0,0,-76.5) cm, multiplicity 1
-I CbmPrimaryGenerator: 1 primary tracks from vertex (0, 0, 0)
>>> Event 8

>>> End of Event 8
-I CbmAsciiGenerator: Event 10, vertex = (0,0,-76.5) cm, multiplicity 1
-I CbmPrimaryGenerator: 1 primary tracks from vertex (0, 0, 0)
>>> Event 9

>>> End of Event 9
Time of this run: User=7.79s Real=8.12s Sys=0.09s
Number of events processed: 10
RealTime=25.810940 seconds, CpuTime=24.780000 seconds
root [1] .q
WARNING - Attempt to delete the physical volume store while geometry closed !
WARNING - Attempt to delete the logical volume store while geometry closed !
WARNING - Attempt to delete the solid store while geometry closed !
WARNING - Attempt to delete the region store while geometry closed !
lx007:hyp>root hit_hyp2test.C -l
root [0]
Processing hit_hyp2test.C...

PSaid instance created... access via gSaid->f()

- RTDB container factory CbmBaseContFact
- RTDB container factory PndFieldContFact
```

- RTDB container factory PndPassiveContFact  
- RTDB container factory PndHypContFact  
-I- CbmRunAna: Opening Input file:  
/d/panda02/asanchez/fairroot\_newPack/pandaroot/macro/hyp/simnewgeotest. root  
Hyp Strip Hit Producer initiated

-I- CbmRunAna::Init :  
/d/panda02/asanchez/fairroot\_newPack/pandaroot/macro/hyp/simnewgeotest. root is connected with:

Info in <TGeoManager::CloseGeometry>: Geometry loaded from file...  
Info in <TGeoManager::SetTopVolume>: Top volume is cave. Master volume is cave  
Info in <TGeoManager::Voxelize>: Voxelizing...  
Info in <TGeoNavigator::BuildCache>: --- Maximum geometry depth set to 100  
Info in <TGeoManager::CloseGeometry>: 247 nodes/ 247 volume UID's in CBM geometry  
Info in <TGeoManager::CloseGeometry>: -----modeler ready-----  
PndFieldCreator::SetParm()  
create PndFieldPar container PndFieldPar  
create PndFieldPar container PndSolenoidPar  
create PndFieldPar container PndDipolePar  
create PndFieldPar container PndTransPar  
create PndFieldPar container PndConstPar  
create PndFieldPar container PndMultiFieldPar  
fdigi par init

\*\*\*\*\*  
initialisation for run id 1582060455  
\*\*\*\*\*

\*\*\* Break \*\*\* segmentation violation  
Using host libthread\_db library "/lib/libthread\_db.so.1".  
Attaching to program: /proc/17251/exe, process 17251  
'system-supplied DSO at 0xfffffe000' has disappeared; keeping its symbols.  
done.  
done.  
[Thread debugging using libthread\_db enabled]  
[New Thread 16384 (LWP 17251)]  
done.  
0x40ed4788 in waitpid () from /lib/libc.so.6  
#1 0x40f5c8c0 in \_\_DTOR\_END\_\_ () from /lib/libc.so.6  
#2 0x40e6d442 in do\_system () from /lib/libc.so.6  
#3 0x40de7c5f in system () from /lib/libpthread.so.0  
#4 0x4021d415 in TUnixSystem::Exec (this=0x80cdc00,  
at unix/src/TUnixSystem.cxx:1824

```

#5 0x4021d8e8 in TUnixSystem::StackTrace (this=0x80cdc00) at
unix/src/TUnixSystem.cxx:2012
#6 0x4021b7a7 in TUnixSystem::DispatchSignals (this=0x80cdc00,
sig=kSigSegmentationViolation)
    at unix/src/TUnixSystem.cxx:974
#7 0x40219a3c in SigHandler (sig=kSigSegmentationViolation) at
unix/src/TUnixSystem.cxx:340
#8 0x40220785 in sighandler (sig=11) at unix/src/TUnixSystem.cxx:3226
#9 0x40de6825 in __pthread_sighandler () from /lib/libpthread.so.0
#10 <signal handler called>
#11 0x4520f33f in delete_PndGeoHypPar (p=0x543301) at
/d/panda02/asanchez/fairroot_newPack/build/hyp/PndHypDict.cxx:2112
#12 0x401f9d82 in TClass::Destructor (this=0x86e9e38, obj=0x543301, dtorOnly=false) at
meta/src/TClass.cxx:3381
#13 0x41007194 in TBufferFile::ReadFastArray (this=0x919d1a0, start=0x90b6b08,
cl=0x86e9e38, n=1, isPreAlloc=false,
    streamer=0x0) at io/src/TBufferFile.cxx:1453
#14 0x41053f4f in TStreamerInfo::ReadBuffer<char**> (this=0x86d7988, b=@0x919d1a0,
arr=@0xbfb10710, first=0, narr=1,
    eoffset=0, arrayMode=0) at io/src/TStreamerInfoReadBuffer.cxx:911
#15 0x4100bec0 in TBufferFile::ReadClassBuffer (this=0x919d1a0, cl=0x86cece8,
pointer=0x90b6ac0)
    at io/src/TBufferFile.cxx:3293
#16 0x4520d3ec in PndHyp::Streamer (this=0x90b6ac0, R(bool)=@0x919d1a0)
    at /d/panda02/asanchez/fairroot_newPack/build/hyp/PndHypDict.cxx:1896
#17 0x401fbe3a in TClass::Streamer (this=0x86cece8, object=0x90b6ac0, b=@0x919d1a0) at
meta/src/TClass.cxx:4263
#18 0x410094c8 in TBufferFile::ReadObjectAny (this=0x919d1a0, clCast=0x826f440) at
io/src/TBufferFile.cxx:2241
#19 0x401d804d in TObjArray::Streamer (this=0x91a4aa8, b=@0x919d1a0) at
cont/src/TObjArray.cxx:388
#20 0x401fbe3a in TClass::Streamer (this=0x84d3470, object=0x91a4aa8, b=@0x919d1a0) at
meta/src/TClass.cxx:4263
#21 0x410094c8 in TBufferFile::ReadObjectAny (this=0x919d1a0, clCast=0x84d3470) at
io/src/TBufferFile.cxx:2241
#22 0x4104f347 in operator>><TObjArray> (buf=@0x919d1a0, obj=@0x919bc8c) at
TBuffer.h:347
#23 0x44f5660b in CbmBaseParSet::Streamer (this=0x919bc40, R(bool)=@0x919d1a0)
    at /d/panda02/asanchez/fairroot_newPack/build/base/CbmDict.cxx:2053
#24 0x4103ed0d in TKey::Read (this=0x86bd3c8, obj=0x919bc40) at io/src/TKey.cxx:943
#25 0x44e9fb50 in CbmDetParRootFileIo::read (this=0x86e37d8, pPar=0x919bc40)
    at /d/panda02/asanchez/fairroot_newPack/pandaroot/parbase/CbmDetParRootFile
Io.cxx:53
#26 0x44ea321a in CbmGenericParRootFileIo::init (this=0x86e37d8, pPar=0x919bc40)
    at /d/panda02/asanchez/fairroot_newPack/pandaroot/parbase/CbmGenericParRoot
FileIo.cxx:25
#27 0x44ea3cfe in CbmParGenericSet::init (this=0x919bc40, inp=0x86ba4b8)
    at /d/panda02/asanchez/fairroot_newPack/pandaroot/parbase/CbmParGenericSet.cxx:37
#28 0x44ea5abb in CbmParSet::init (this=0x919bc40) at
/d/panda02/asanchez/fairroot_newPack/pandaroot/parbase/CbmParSet.cxx:43
#29 0x44eae710 in CbmRuntimeDb::initContainers (this=0x84a1d98)
    at /d/panda02/asanchez/fairroot_newPack/pandaroot/parbase/CbmRuntimeDb.cxx: 393

```

```

#30 0x44eae25f in CbmRuntimeDb::initContainers (this=0x84a1d98, runId=1582060455,
refId=-1, fileName=0x44fb0c0 "")
    at /d/panda02/asanchez/fairroot_newPack/pandaroot/parbase/CbmRuntimeDb.cxx: 344
#31 0x44f46330 in CbmRunAna::Init (this=0x84c8760) at
/d/panda02/asanchez/fairroot_newPack/pandaroot/base/CbmRunAna.cxx:106
#32 0x44f82630 in G__CbmDict_530_0_4 (result7=0xbfb20af0, funcname=0x84c5928 "\001",
libp=0xbfb1ad10, hash=0)
    at /d/panda02/asanchez/fairroot_newPack/build/base/CbmDict.cxx:9325
#33 0x407c68ca in Cint::G__ExceptionWrapper (funcp=0x44f8260a <G__CbmDict_530_0_4>,
result7=0xbfb20af0,
    funcname=0x84c5928 "\001", libp=0xbfb1ad10, hash=0) at cint/src/Api.cxx:364
#34 0x408b5ec0 in G__call_cppfunc (result7=0xbfb20af0, libp=0xbfb1ad10, ifunc=0x84c5928,
ifn=0)
    at cint/src/v6_newlink.cxx:512
#35 0x408996a3 in G__interpret_func (result7=0xbfb20af0, funcname=0xbfb206f0 "Init",
libp=0xbfb1ad10, hash=404,
    p_ifunc=0x84c5928, funcmatch=1, memfunc_flag=1) at cint/src/v6_ifunc.cxx:5118
#36 0x40879b15 in G__getfunction (item=0xbfb236b6 "Init()", known3=0xbfb22efc,
memfunc_flag=1) at cint/src/v6_func.cxx:2511
#37 0x4095fc20 in G__getstructmem (store_var_type=112, varname=0xbfb22bd0 "basiclibs",
membername=0xbfb236b6 "Init(),
    tagname=0xbfb21430 "fRun", known2=0xbfb22efc, varglobal=0x409eca00, objptr=2) at
cint/src/v6_var.cxx:6562
#38 0x40953ce4 in G__getvariable (item=0xbfb236b0 "fRun->Init()", known2=0xbfb22efc,
varglobal=0x409eca00, varlocal=0x0)
    at cint/src/v6_var.cxx:5206
#39 0x4086b332 in G__getitem (item=0xbfb236b0 "fRun->Init()") at cint/src/v6_expr.cxx:1884
#40 0x40868e4a in G__getexpr (expression=0xbfb24d80 "fRun->Init()") at
cint/src/v6_expr.cxx:1470
#41 0x408dba67 in G__exec_function (statement=0xbfb24d80 "fRun->Init()", pc=0xbfb251ac,
piout=0xbfb251a4,
    plargestep=0xbfb25194, presult=0xbfb24d50) at cint/src/v6_parse.cxx:598
#42 0x408ea6ca in G__exec_statement (mparen=0xbfb25230) at cint/src/v6_parse.cxx:6923
#43 0x40840c9a in G__exec_tempfile_core (
    file=0xbfb2e180 "
/d/panda02/asanchez/fairroot_newPack/pandaroot/macro/hyp./hit_hyp2test. C ", fp=0x0)
    at cint/src/v6_debug.cxx:251
#44 0x40842493 in G__exec_tempfile (
    file=0xbfb2e180 "
/d/panda02/asanchez/fairroot_newPack/pandaroot/macro/hyp./hit_hyp2test. C ") at
cint/src/v6_debug.cxx:798
#45 0x408f654c in G__process_cmd (line=0x406f4d17 "bal_17", prompt=0x80d127c "",
more=0x80d1274, err=0xbfb2e9fc,
    rslt=0xbfb2ea00) at cint/src/v6_pause.cxx:3070
#46 0x401e404a in TCint::ProcessLine (this=0x80d1258, line=0x406f4d17 "bal_17",
error=0xbfb31274) at meta/src/TCint.cxx:289
#47 0x401e4421 in TCint::ProcessLineSynch (this=0x80d1258, line=0x406f4d17 "bal_17",
error=0xbfb31274)
    at meta/src/TCint.cxx:354
#48 0x40131531 in TApplication::ExecuteFile (file=0xbfb2f173 "hit_hyp2test.C",
error=0xbfb31274)
    at base/src/TApplication.cxx:897

```

```
#49 0x40130e00 in TApplication::ProcessFile (this=0x80f2bc8, file=0xbfb2f173  
"hit_hyp2test.C", error=0xbfb31274)  
    at base/src/TApplication.cxx:787  
#50 0x40130d43 in TApplication::ProcessLine (this=0x80f2bc8, line=0xbfb2f170 ".x  
hit_hyp2test.C", sync=false, err=0xbfb31274)  
    at base/src/TApplication.cxx:760  
#51 0x40d738c4 in TRint::Run (this=0x80f2bc8, retrn=false) at rint/src/TRint.cxx:336  
#52 0x08048ebe in main (argc=1, argv=0xbfb31334) at main/src/rmain.cxx:29  
Root >
```

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Subject: Re: break segm,antation with geant4  
Posted by [Ralf Kliemt](#) on Wed, 12 Mar 2008 09:50:01 GMT

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Hi Alicia,

If I see this correctly you have some Problem with the geometry parameter database:  
from digi output#11 0x4520f33f in delete\_PndGeoHypPar (p=0x543301) at  
/d/panda02/asanchez/fairroot\_newPack/build/hyp/PndHypDict.cxx:2112

You should check if you write it during the simulation correctly. Maybe there is a problem with  
the versioning (I cannot check right now where this number comes from):  
from simulation outputRuntimeDb: write container PndGeoHypPar  
\*\*\* PndGeoHypPar written to ROOT file version: 25

First thoughts,  
Ralf.

---

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Subject: Re: break segm,antation with geant4  
Posted by [asanchez](#) on Wed, 12 Mar 2008 10:30:58 GMT

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Hi again,  
bu running the debugger i get that

```
lxi005:hyp>gdb --args root.exe hit_hyp2test.C
GNU gdb 6.3-debian
Copyright 2004 Free Software Foundation, Inc.
GDB is free software, covered by the GNU General Public License, and you are
welcome to change it and/or distribute copies of it under certain conditions.
Type "show copying" to see the conditions.
There is absolutely no warranty for GDB. Type "show warranty" for details.
This GDB was configured as "i386-linux"...Using host libthread_db library
"/lib/libthread_db.so.1".
```

```
(gdb) run
Starting program: /misc/cbmssoft/Debian3.1/201107/tools/root_r20930/bin/root.exe
hit_hyp2test.C
```

[Thread debugging using libthread\_db enabled]

[New Thread 16384 (LWP 29881)]

```
*****
*          *
*      W E L C O M E   t o   R O O T   *
*          *
* Version 5.17/05 16 October 2007  *
*          *
* You are welcome to visit our Web site  *
*     http://root.cern.ch           *
*          *
*****
```

ROOT 5.17/05 (trunk@20369, Nov 21 2007, 16:19:00 on linux)

CINT/ROOT C/C++ Interpreter version 5.16.27, Oct 25, 2007

Type ? for help. Commands must be C++ statements.

Enclose multiple statements between {}.

root [0]

Processing hit\_hyp2test.C...

PSaid instance created... access via gSaid->f()

- RTDB container factory CbmBaseContFact
- RTDB container factory PndFieldContFact
- RTDB container factory PndPassiveContFact
- RTDB container factory PndHypContFact

-I- CbmRunAna: Opening Input file:

/d/panda02/asanchez/fairroot\_newPack/pandaroot/macro/hyp/simnewgeotest.root  
Hyp Strip Hit Producer initiated

-I- CbmRunAna::Init :

/d/panda02/asanchez/fairroot\_newPack/pandaroot/macro/hyp/simnewgeotest.root is connected with:

Info in <TGeoManager::CloseGeometry>: Geometry loaded from file...

Info in <TGeoManager::SetTopVolume>: Top volume is cave. Master volume is cave

Info in <TGeoManager::Voxelize>: Voxelizing...

Info in <TGeoNavigator::BuildCache>: --- Maximum geometry depth set to 100

Info in <TGeoManager::CloseGeometry>: 247 nodes/ 247 volume UID's in CBM geometry

Info in <TGeoManager::CloseGeometry>: -----modeler ready-----

PndFieldCreator::SetParm()

create PndFieldPar container PndFieldPar  
create PndFieldPar container PndSolenoidPar  
create PndFieldPar container PndDipolePar  
create PndFieldPar container PndTransPar  
create PndFieldPar container PndConstPar  
create PndFieldPar container PndMultiFieldPar  
fdigi par init

```
*****
*****
```

initialisation for run id 1265480832

\*\*\*\*\*

Program received signal SIGSEGV, Segmentation fault.  
[Switching to Thread 16384 (LWP 29881)]  
0x4520f33f in delete\_PndGeoHypPar (p=0x543301) at  
/d/panda02/asanchez/fairroot\_newPack/build/hyp/PndHypDictcxx:2112  
warning: Source file is more recent than executable.

2112 delete ((::PndGeoHypPar\*)p);

(gdb) bt

Any idea?

The point is that when i use geant3 it runs.

Could the Problem be related with the geo file?

If i use the old one it runs with both  
geant3 and geant4.

cheers ALicia.

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Subject: Re: break segm,antation with geant4

Posted by [Mohammad Al-Turany](#) on Wed, 12 Mar 2008 13:32:19 GMT

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Hi,

you crash in the reconstruction! the output structure is identical for g3 and g4! and from your output it looks that he is crashing in the parameter initialization or directly after that, can you try to remove the parameter file completely and run a new simulation and reconstruction!

Mohammad

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Subject: Re: break segm,antation with geant4

Posted by [asanchez](#) on Wed, 12 Mar 2008 14:04:58 GMT

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Hi again,  
i have redone the geo file.  
and now it works.  
I really don't know  
what i have changed to make it run.  
thank you anyway.  
Aaaliacia.

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