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Subject: Re: New Solenoid and MVD

Posted by [Stefano Spataro](#) on Wed, 09 Apr 2008 08:18:03 GMT

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Hi Tobias,

unfortunately now I have errors even with Geant3 in the event loop, after the first event:

Toggle Spoiler Cross section calculation concluded successfully

-I- CbmMCApplication:: Monte carlo Engine Initialisation with TGeant3TGeo

\*\*\*\* GTRIGI: IEVENT= 1 IDEVT= 1 Random Seeds = 4357 0

CbmMCApplication::GeneratePrimaries()

-I CbmPrimaryGenerator: 6 primary tracks from vertex (0, 0, 0)

\*\*\* Break \*\*\* segmentation violation

Using host libthread\_db library "/lib/libthread\_db.so.1".

Attaching to program: /proc/22362/exe, process 22362

`system-supplied DSO at 0xffffe000' has disappeared; keeping its symbols.

[Thread debugging using libthread\_db enabled]

[New Thread -1223345984 (LWP 22362)]

0xffffe410 in \_\_kernel\_vsyscall ()

#1 0xb720da03 in waitpid () from /lib/libc.so.6

#2 0xb71b8569 in strtold\_l () from /lib/libc.so.6

#3 0xb72ae36d in system () from /lib/libpthread.so.0

#4 0xb79f2dad in TUnixSystem::Exec () from

/d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18

#5 0xb79f7a07 in TUnixSystem::StackTrace () from

/d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18

#6 0xb79f6a0f in TUnixSystem::DispatchSignals () from

/d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18

#7 0xb79f6acd in SigHandler () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18

#8 0xb79f0390 in sighandler () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18

#9 <signal handler called>

#10 0xb6e25eb9 in TGeoVoxelFinder::GetValidExtra () from

/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so

#11 0xb6e2bece in TGeoVoxelFinder::GetNextCandidates () from

/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so

#12 0xb6e26f4a in TGeoVoxelFinder::GetNextVoxel () from

/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so

#13 0xb6e00a7c in TGeoShapeAssembly::DistFromOutside () from

/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so

#14 0xb6e00c3e in TGeoShapeAssembly::DistFromOutside () from

/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so

#15 0xb6e009a5 in TGeoShapeAssembly::DistFromOutside () from

/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so

#16 0xb6dd9adb in TGeoNavigator::FindNextDaughterBoundary () from

/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so

#17 0xb6ddd5e0 in TGeoNavigator::FindNextBoundary () from

/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so

#18 0xb6dbe759 in TGeoManager::FindNextBoundary () from

/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so

#19 0xb2f0ae26 in gtnextTGeo () at TGeant3TGeo.cxx:2285

#20 0xb2efe45a in gtnext\_ () at TGeant3.cxx:6581

```

#21 0xb2da79af in g3thadr_ () at gthadr.F:258
#22 0xb2db325d in g3track_ () at gtrack.F:253
#23 0xb2f0fca7 in gutrak_ () at TGeant3gu.cxx:555
#24 0xb2db423a in gtreveroot_ () at gtreveroot.F:168
#25 0xb2f0fc77 in gutrev_ () at TGeant3gu.cxx:575
#26 0xb2ca38ac in g3trig_ () at gtrig.F:62
#27 0xb2f01cd7 in TGeant3::Gtrig (this=0x85d6088) at TGeant3.cxx:3153
#28 0xb2efe2bb in TGeant3::ProcessEvent (this=0x85d6088) at TGeant3.cxx:6256
#29 0xb2f02fc6 in TGeant3::ProcessRun (this=0x85d6088, nevent=100) at TGeant3.cxx:6226
#30 0xb4eff69b in CbmMCApplication::RunMC (this=0x855bb70, nofEvents=100) at
/home/spataro/dev/pandaroot/base/CbmMCApplication.cxx:187
#31 0xb4f11e4b in CbmRunSim::Run (this=0x85023e8, NStart=100, NStop=0) at
/home/spataro/dev/pandaroot/base/CbmRunSim.cxx:172
#32 0xb4f50917 in G__CbmDict_531_0_5 (result7=0xbfcd414c, funcname=0x8506e28 "\001",
libp=0xbfcd0684, hash=0) at /home/spataro/dev/cmar08/base/CbmDict.cxx:9374
#33 0xb7462b1a in Cint::G__ExceptionWrapper () from
/d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#34 0xb753a101 in G__call_cppfunc () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#35 0xb7514c7c in G__interpret_func () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#36 0xb75045e0 in G__getfunction () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#37 0xb75cfd88 in G__getstructmem () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#38 0xb75c5c4f in G__getvariable () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#39 0xb74e347d in G__getitem () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#40 0xb74e9190 in G__getexpr () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#41 0xb7561a59 in G__exec_statement () from
/d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#42 0xb74cffb6 in G__exec_tempfile_core () from
/d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#43 0xb74d0216 in G__exec_tempfile () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#44 0xb75714ff in G__process_cmd () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18
#45 0xb79c9636 in TCint::ProcessLine () from
/d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18
#46 0xb79c4606 in TCint::ProcessLineSynch () from
/d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18
#47 0xb792b757 in TApplication::ExecuteFile () from
/d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18
#48 0xb792bc14 in TApplication::ProcessFile () from
/d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18
#49 0xb7929156 in TApplication::ProcessLine () from
/d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18
#50 0xb7407635 in TRint::Run () from /d/c0/cbmsoft/mar08/tools/root/lib/libRint.so.5.18
#51 0x08048e2b in main ()
Root >

```

In Geant4 the geometry initialization works, but I have the same G3 error inside the event loop after the first event:

Toggle Spoiler

```
### Run 0 start.
```

```
CbmMCApplication::GeneratePrimaries()
```

```
-I CbmPrimaryGenerator: 6 primary tracks from vertex (0, 0, 0)
```

```
>>> Event 0
```

```
Program received signal SIGSEGV, Segmentation fault.
[Switching to Thread -1222772544 (LWP 22395)]
Error while running hook_stop:
Invalid type combination in ordering comparison.
0xb6eb1eb9 in TGeoVoxelFinder::GetValidExtra () from
/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so
gdb> bt
#0 0xb6eb1eb9 in TGeoVoxelFinder::GetValidExtra () from
/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so
#1 0xb6eb7ece in TGeoVoxelFinder::GetNextCandidates () from
/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so
#2 0xb6eb2f4a in TGeoVoxelFinder::GetNextVoxel () from
/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so
#3 0xb6e8ca7c in TGeoShapeAssembly::DistFromOutside () from
/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so
#4 0xb6e8cc3e in TGeoShapeAssembly::DistFromOutside () from
/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so
#5 0xb6e8c9a5 in TGeoShapeAssembly::DistFromOutside () from
/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so
#6 0xb6e65adb in TGeoNavigator::FindNextDaughterBoundary () from
/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so
#7 0xb6e695e0 in TGeoNavigator::FindNextBoundary () from
/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so
#8 0xb6e4a759 in TGeoManager::FindNextBoundary () from
/d/c0/cbmsoft/mar08/tools/root/lib/libGeom.so
#9 0xb1fbaf9f in TG4RootNavigator::ComputeStep () from
/d/c0/cbmsoft/mar08/tools/root/lib/libG4root.so
#10 0xb42224b8 in G4PropagatorInField::IntersectChord (this=0x9b9eed0,
StartPointA=@0xbf97c2c0, EndPointB=@0xbf97c2a8, NewSafety=@0xbf97c270,
LinearStepLength=@0xbf97c1e8, IntersectionPoint=@0xbf97c1f0) at
G4PropagatorInField.cc:1159
#11 0xb4225cc7 in G4PropagatorInField::ComputeStep (this=0x9b9eed0,
pFieldTrack=@0xbf97c428, CurrentProposedStepLength=123.90114966357788,
currentSafety=@0xbf97c6d8, pPhysVol=0x9bb2508) at G4PropagatorInField.cc:274
#12 0xb3de1acb in G4Transportation::AlongStepGetPhysicalInteractionLength
(this=0x9d54890, track=@0xa511570, currentMinimumStep=123.90114966357788,
currentSafety=@0xbf97c6d8, selection=0x9b9f824) at G4Transportation.cc:303
#13 0xb286db4b in G4VProcess::AlongStepGPIL (this=0x9d54890, track=@0xa511570,
previousStepSize=8.4302939110103079, currentMinimumStep=123.90114966357788,
proposedSafety=@0xbf97c6d8, selection=0x9b9f824) at G4VProcess.hh:425
#14 0xb286c5c1 in G4SteppingManager::DefinePhysicalStepLength (this=0x9b9f718) at
G4SteppingManager2.cc:223
#15 0xb2868bd6 in G4SteppingManager::Stepping (this=0x9b9f718) at
G4SteppingManager.cc:181
#16 0xb28772b5 in G4TrackingManager::ProcessOneTrack (this=0x9b9f6f0,
apValueG4Track=0xa511570) at G4TrackingManager.cc:126
#17 0xb274c2ec in G4EventManager::DoProcessing (this=0x9b9f6a8, anEvent=0x9bab6e0) at
G4EventManager.cc:185
#18 0xb274ca80 in G4EventManager::ProcessOneEvent (this=0x9b9f6a8,
anEvent=0x9bab6e0) at G4EventManager.cc:335
#19 0xb26f0103 in G4RunManager::DoEventLoop (this=0x9b9f5f8, n_event=0x64,
```

macroFile=0x0, n\_select=0xffffffff) at G4RunManager.cc:235  
#20 0xb26eea8a in G4RunManager::BeamOn (this=0x9b9f5f8, n\_event=0x64, macroFile=0x0, n\_select=0xffffffff) at G4RunManager.cc:140  
#21 0xb1f406b6 in TG4RunManager::ProcessRun (this=0x866f478, nofEvents=0x64) at TG4RunManager.cxx:384  
#22 0xb1f449d7 in TGeant4::ProcessRun (this=0x866a510, nofEvents=0x64) at TGeant4.cxx:1140  
#23 0xb4f8b69b in CbmMCApplication::RunMC (this=0x855fc18, nofEvents=0x64) at /home/spataro/dev/pandaroot/base/CbmMCApplication.cxx:187  
#24 0xb4f9de4b in CbmRunSim::Run (this=0x8502690, NStart=0x64, NStop=0x0) at /home/spataro/dev/pandaroot/base/CbmRunSim.cxx:172  
#25 0xb4fdc917 in G\_\_CbmDict\_531\_0\_5 (result7=0xbf98aaec, funcname=0x85070d0 "\001", libp=0xbf987024, hash=0x0) at /home/spataro/dev/cmar08/base/CbmDict.cxx:9374  
#26 0xb74eeb1a in Cint::G\_\_ExceptionWrapper () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#27 0xb75c6101 in G\_\_call\_cppfunc () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#28 0xb75a0c7c in G\_\_interpret\_func () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#29 0xb75905e0 in G\_\_getfunction () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#30 0xb765bd88 in G\_\_getstructmem () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#31 0xb7651c4f in G\_\_getvariable () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#32 0xb756f47d in G\_\_getitem () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#33 0xb7575190 in G\_\_getexpr () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#34 0xb75eda59 in G\_\_exec\_statement () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#35 0xb755bfb6 in G\_\_exec\_tempfile\_core () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#36 0xb755c216 in G\_\_exec\_tempfile () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#37 0xb75fd4ff in G\_\_process\_cmd () from /d/c0/cbmsoft/mar08/tools/root/lib/libCint.so.5.18  
#38 0xb7a55636 in TCint::ProcessLine () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18  
#39 0xb7a50606 in TCint::ProcessLineSynch () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18  
#40 0xb79b7757 in TApplication::ExecuteFile () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18  
#41 0xb79b7c14 in TApplication::ProcessFile () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18  
#42 0xb79b5156 in TApplication::ProcessLine () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18  
#43 0xb7493285 in TRint::HandleTermInput () from /d/c0/cbmsoft/mar08/tools/root/lib/libRint.so.5.18  
#44 0xb74917c5 in TTermInputHandler::Notify () from /d/c0/cbmsoft/mar08/tools/root/lib/libRint.so.5.18  
#45 0xb7493cb4 in TTermInputHandler::ReadNotify () from /d/c0/cbmsoft/mar08/tools/root/lib/libRint.so.5.18  
#46 0xb7a825eb in TUnixSystem::CheckDescriptors () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18  
#47 0xb7a83197 in TUnixSystem::DispatchOneEvent () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18  
#48 0xb7a0d11e in TSystem::InnerLoop () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18  
#49 0xb7a10e2c in TSystem::Run () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18  
#50 0xb79b3a28 in TApplication::Run () from /d/c0/cbmsoft/mar08/tools/root/lib/libCore.so.5.18

#51 0xb74937d5 in TRint::Run () from /d/c0/cbmsoft/mar08/tools/root/lib/libRint.so.5.18  
#52 0x08048e2b in main ()

So there is still something wrong.

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