

Hi Florian,

ok thx for the tip. I saw that reason that the lmd macros did not deliver any results was that the simulation macro did not generate geant hits in the lumi detector geometry. As if the lumi geometry is not seen by it.

Below is the output log of the macro until geant start propagating particles. I stumbled across the line

Error in <TGeoVoxelFinder::SortAll>: Volume lmd\_vol\_ref\_sys: Cannot make slices on any axis

Is that normal? Does anyone know if this is an error that can be ignored?

Quote:

```
[INFO ] Media file used: /home/pflueger/pandaroot/geometry/media_pnd.geo
Info in (PndGeoHandling::Instance): Making a new instance using the framework.
- I - PndLmdDetector: fListOfSensitives contains:
  LumActive
Info in <TGeoManager::TGeoManager>: Geometry FAIRGeom, FAIR geometry created
```

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  initialisation for run id 1505472465
```

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*****
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-I- FairRunTimeDB::InitContainer() PndSensorNamePar
[ERROR ] init() PndSensorNamePar not initialized
Error in <FairRuntimeDb::initContainers()>: Error occurred during initialization
Loading Geant4 libraries (using geant4-config) ...
31
Loading VGM libraries ...
Loading g4root library ...
Loading geant4vmc library ...
Loading mtrout library ...
```

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Geant4 Virtual Monte Carlo
Version 3.3 ( 15 January 2016 )
WWW : http://root.cern.ch/drupal/content/geant4-vmc
=====
```

```
Info in <TGeoManager::SetTopVolume>: Top volume is cave. Master volume is cave
Info in <TGeoNavigator::BuildCache>: --- Maximum geometry depth set to 100
<I> PndPipe - Using geometry /home/pflueger/pandaroot/geometry/beampipe_201309.root
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...
Error in <TGeoVoxelFinder::SortAll>: Volume lmd_vol_ref_sys: Cannot make slices on any
```

```

axis
Info in <TGeoManager::CloseGeometry>: Building cache...
Info in <TGeoManager::CountLevels>: max level = 8, max placements = 36
Info in <TGeoManager::CloseGeometry>: 1347 nodes/ 81 volume UID's in FAIR geometry
Info in <TGeoManager::CloseGeometry>: -----modeler ready-----
Info in <TObject::SetNavigator>: TG4RootNavigator created and registered to
G4TransportationManager
isMaster=1
Running TVirtualMCApplication::ConstructGeometry
*****
Geant4 version Name: geant4-10-02-patch-01   (26-February-2016)
      Copyright : Geant4 Collaboration
      Reference : NIM A 506 (2003), 250-303
      WWW : http://cern.ch/geant4
*****

Info in <TObject::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...
==> GEANT4 physical volumes created and mapped to TGeo hierarchy...
### INFO: TG4RootDetectorConstruction::Construct() finished
TG4PostDetConstruction::Initialize
G4 Stat: instantiated 404 logical volumes
      1346 physical volumes
Info in <TObject::ConnectToG4>: ROOT detector construction class connected to
G4RunManager
Adding HadronPhysicsList QGSP_BERT_EMV
G4PhysListFactory::GetReferencePhysList <QGSP_BERT_EMV> EMoption= 1
<<< Geant4 Physics List simulation engine: QGSP_BERT 4.0

<<< Reference Physics List QGSP_BERT_EMV is built

Adding SpecialPhysicsList stepLimiter+specialCuts+
### TG4SpecialControlsV2 constructed
Visualization Manager instantiating with verbosity "warnings (3)"...
Geant4 has been created.
-I g4Config() using g4conf macro: /home/pflueger/pandaroot/gconfig/g4config.in
SetCuts Macro: Setting Processes..
SetCuts Macro: Setting cuts..
TG4RootDetectorConstruction::ConstructSDandField
TG4PostDetConstruction::InitializeSDandField
-I- Initializing PndSdsDetector()
-W- PndSdsDetector: New branch LMDPoint created!
Global magnetic field created with stepper ClassicalRK4
### INFO: TG4RootDetectorConstruction::ConstructSDandField finished
### Adding tracking cuts for neutron TimeCut(ns)= 10000 KinEnergyCut(MeV)= 0
### Hadron physics constructed.
### Processes mapped to VMC controls ok.
### Step limiter physics constructed.
### Special Cuts constructed.

```

### User particles physics constructed.  
### Processes mapped to VMC codes ok.  
TGEmModelPhysics::ConstructProcess  
No EM models are defined.  
Available UI session types: [ GAG, tcsh, csh ]  
Converting VMC cuts in regions  
Number of added regions: 9

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GEANT4 Geometry statistics:

404 logical volumes

1346 physical volumes

15 materials

14 user limits

81 sensitive detectors

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Stefan

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