Subject: FairRunAna::SetGeomFile seems not to work
Posted by Volker Friese on Wed, 05 Jun 2013 20:08:15 GMT
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The method SetGeomFile of FairRunAna should enable to use a different geometry in the analysis run than was used in the simulation and stored in the parameter database, a feature which is needed e.g. for studying the effects of mis-alignment.

Unfortunately, the implementation seems not to be correct. Whatever geometry file is set in this method, what you get in the end is the geometry from the parameters. This can be seen from the screen output:

Quote:[INFO] Opening Geometry input file: data/000.geofile.root
Info in <TGeoNavigator::BuildCache>: --- Maximum geometry depth set to 100
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 <TGeoManager::CloseGeometry>: 2640 nodes/ 63 volume UID's in FAIR geometry
Info in <TGeoManager::CloseGeometry>: ----------modeler ready----------
[INFO] The input consists out of the following trees and files:
[INFO] - cbmsim
[INFO] - data/x200.mc.root
[INFO] - FriendTree_1
[INFO] - data/x200.raw.root
[INFO] Parameter and input file are available, Assure that basic info is there for the run!
[INFO] The number of entries in chain is 100

****
initialisation for run id 1370261320
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-I- FairRunTimeDB::InitContainer() FairBaseParSet
Warning in <TGeoManager::Init>: Deleting previous geometry: FAIRGeom/FAIR geometry
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 <TGeoManager::CloseGeometry>: 2640 nodes/ 63 volume UID's in FAIR geometry
Info in <TGeoManager::CloseGeometry>: ----------modeler ready----------
Container FairBaseParSet initialized from ROOT file.

Evidently, the geometry is first read from the specified geometry file and then deleted and replaced with the one from the parameter container.

I tried to locate where that happens and followed from FairRunAna::Init() to FairRunTimeDb::initContainers to FairParSet::init() to FairParSet::init(FairParIo*) to FairParGenericSet::init(FairParIo*) to FairParDetIo::init(FairParGenericSet*).... but eventually gave up, being lost in this jungle.