Subject: MC true match with geant4
Posted by donghee on Thu, 31 Oct 2013 11:14:26 GMT

Dear all,

I am wondering how one can handle MC true match for Geant4 case.
I am using TGeant4 and PndEvtGenDirect for evtgen generator.

If I turn off saving the event tree,
evtGen->SetStoreTree(kFALSE);
then simulation process works fine.

But If I turn on StoreTree to use MCtruth match later on for signal MC analysis,
evtGen->SetStoreTree(kTRUE);
then Geant4 cannot recognize this event tree due to different particle definition.

How can we avoid this problem?

We need a event tree to make a truth matching in analysis level.
It must to be saved!

Do you have any idea or solution for this problem?

Quote:
Run 0 start.
 -W FairPrimaryGenerator: PDG code 88881 not found in database. This warning can be
savely ignored.
Warning in <TParticle::SetPdgCode>: PDG code 88881 unknown from TDatabasePDG
[INFO   ] FairPrimaryGenerator: (Event 1) 12 primary tracks from vertex (0.000000, 0.000000,
0.000000) with beam gradiant (0.000000, 0.000000) Event Time = 0.013075 (ns)

   TG4PrimaryGeneratorAction::TransformPrimaries:
   G4ParticleTable::FindParticle() failed for XXX pdgEncoding=88881.
*** TG4Exception: Aborting execution ***

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 !
Warning in <TStreamerInfo::Build:>: TStreamerBase: base class TStreamerElement has no
streamer or dictionary it will not be saved
root [0]