
Subject: Usage of Geant4 in CBMRoot

Posted by [Andrey Chernogorov](#) on Thu, 18 Jun 2009 14:04:25 GMT

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Hi everyone,

I would like to use Geant4 in my simulations instead Geant3 in CBMRoot, but couldn't find where I can fix my choice (inside C-file or macros)

(I've found some info in /base/CbmMCApplication.cxx, ../CbmRunSim.cxx, /trunk/gconfig/g4config.C, ../g4config.in, ../SetCuts.C, but it's not enough).

I would like to control list of particles and processes, where I can do it?

Now I'm using DEC08-version of CBMRoot.

Fanks for any ideas.

Subject: Re: Usage of Geant4 in CBMRoot

Posted by [Volker Friese](#) on Thu, 18 Jun 2009 15:25:35 GMT

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The choice which transport engine to use is done in the simulation macro (see for instance macro/run/run_sim.C), by the method

```
void FairRunSim::SetName(const char* engine);
```

where engine can be "TGeant3", "TGeant4" or "TFluka" (the latter not recommended).

Geant4-related settings (physics and particle lists) must be implemented in gconfig/g4config.C

Subject: Control of Cuts for Geant4 in CBMRoot

Posted by [Andrey Chernogorov](#) on Mon, 22 Jun 2009 12:56:29 GMT

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Hello everyone, I've some problem with usage of Geant4 in CBMRoot.

How I can control cuts for any particles for TGeant4?

Didn't help any changes inside /trunk/gconfig/SetCuts.C

All time Range cuts = 1 mm (or equal in keV).

Didn't help changing: defaultCutValue=1*mm; -> 0.1*mm;
inside /geant4.9.1.p02/source/run/srcG4UserPhysicsList.cxx

As I understand I should change something in/for G4 VMC, but I didn't find it, not yet.

Fanks for any ideas.
