
Subject: Pythia as external decayer for Geant3

Posted by [Mohammad Al-Turany](#) on Wed, 10 Oct 2007 22:47:31 GMT

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Hallo,

In SVN 1594, Pythia can be used as external decayer to Geant3, for Geant4 there is still some work to do before we can use it. To use this functionality, in the simulation macro you have to add the line:

```
fRun->SetPythiaDecayer(kTRUE);
```

after choosing the MC engine.

in the directory gconfig a new file is added, namely: G3DecayConfig.C, in this macro one can force geant3 to use Pythia as decayer for certain particles using the pdg code.

regards

Mohammad

Subject: Re: Pythia as external decayer for Geant3

Posted by [asanchez](#) on Mon, 01 Jun 2015 12:34:18 GMT

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Dear all,

We are simulating the transport of Xi minus particles via Geant4. Standard decay Modus is pion minus plus lambda. Nevertheless we are getting strange results in the output. One of the reasons might be that some compound nucleus is formed leading to some fragmentation. But something caught my attention by looking into the settings of Gconfig / gConfig4.C. It seems that pithia decayer was set as external decayer. In this case, I would like to know whether the default flag was set to true or false.

Thank you in advance

Alicia S.

Subject: Re: Pythia as external decayer for Geant3

Posted by [StefanoSpataro](#) on Mon, 01 Jun 2015 13:43:12 GMT

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From g4Config.C:

```
41  if(FairRunSim::Instance()->IsExtDecayer()){
42    TVirtualMCDecayer* decayer = TPythia6Decayer::Instance();
43    geant4->SetExternalDecayer(decayer);
44  }
```

If you don't set the instance the external decayer should not be active.
