Subject: event registration
Posted by Raphael Cervantes on Tue, 12 Mar 2013 17:15:02 GMT
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Can someone help me understand how a detector in FairRoot registers an event? I need to understand what criterion a detector uses to registering events, e.g. if a detector registers a particle that just grazes the edge of it, or how much energy is required, etc...

I'm am currently looking at the Rutherford example. In line 71 of FairRutherford.cxx, it says " if (gMC->IsTrackEntering()) {". Where is the IsTrackEntering() method defined?

I hope my question makes sense. Let me know if I need to clarify anything.

Subject: Re: event registration
Posted by Mohammad Al-Turany on Wed, 08 Jan 2014 08:54:11 GMT
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Hi,

better too late than never!

Is IsTrackEntering() is one flag from a set of state flags in Geant3/4 which tell you in about the status of the particle being transported with respect to the volume that you defined as sensitive in your detector.

The stepping of the transport engine forward the action (call the so-called processHit method of your detector) only when it enters a volume that you define as sensitive so that you create a point (hit) or take what ever action your detector should do.

cheers,

Mohammad