Subject: Note on energyloss in GEANT
Posted by Ralf Kliemt on Thu, 14 Feb 2008 14:07:27 GMT

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Hi all,

Klaus, a student in Desden, found the following behavior:Quote:
By analysing simulated data of Monte-Carlo points we noticed strange diruptions of the
Bethe-Bloch graphs. This happend by using Geant3 and also by using Geant4. To get to know
if the hits above and beneath the disruption are part of the same Bethe-Bloch graph we
seperated the hits above and checked the Pdg-Code (wtih the help of the CbmMcTrack). The
result is that all hits are part of the Bethe-Bloch graph for protons. To verify this we also printed
only the hits of protons.
We used the momentum the particles have by entering the detectormaterial. If you use the
momentum on the other side of the detectormaterial the hits above the disruption are missing,
because the momentum was set to zero (because the particle was stuck in the material).

So after all this is nothing to worry about, since this represents the stopped particles. I just
wanted to inform you.

Ralf

File Attachments
1) Kante.gif, downloaded 1508 times