Subject: Re: Tracking news

Posted by Lia Lavezzi on Fri, 18 Apr 2008 10:43:07 GMT

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Hi Alicia,

concerning GEANE, unfortunately, there is still the problem of low momenta (sorry about that).

Its limit value is not fixed (for example I remeber I tracked down to 300 MeV), but as you go down with the momentum the probability of having some event with a track which begins to bend too much or has a momentum which fades to zero raises: these are the cases when a flag is returned (the well known IERR error from the FORTRAN) and the code crashes. We are thinking about bringing this flag to the interface, so that the crash can be avoided using this information.

Anyway, when the code does not crash, the results of GEANE are reliable: the problem with low momentum particles is only the crash, since when the track bends too much within a single step or has 0 momentum GEANE stops because it does not know how to go on.

So you can try to run your low momentum events: if you don't fall in one of the mentioned cases everything should work properly, but consider that if the momentum is too small the probability to avoid these problems is small too

Ciao, Lia.