Subject: Re: Lhe Tracking: Kalman Task with STT, worse results
Posted by Lia Lavezzi on Mon, 06 Dec 2010 11:57:38 GMT

Hi David and Stefano,
   just a remark: to check the Kalman independently from LHE in the STT, please use SttMode = 4.

If you use SttMode = 4 it means you are using the points coming from MC as input for the track finding. Moreover if you use the LHE ideal you should be able to connect each hit to each track.

Then, when you make the Kalman on the found track you use the information from the detector (the isochrone) and nomore the mc info, so the Kalman is "real".

Keep in mind, however, that even if you use SttMode = 4, you load in input of the LHE track finder the helix hit array coming from the local reconstruction of the STT, so the problem of the double step in STT reconstruction (local + LHE) is still there.
You will not use all the MCpoints in STT, but only the MCpoints connected to those hits which are inside the helix hit array.
What you avoid is to use the reconstructed hit (helix hit) of the STT, which may be badly reconstructed, in the LHE.

I suggest (as Stefano did) to use Gianluigi' s mvd + stt pattern recognition instead of LHE!

Cheers,
Lia.