Subject: Re: Momentum resolution and reconstruction efficiency of LHE tracking
Posted by Johan Messchendorp on Thu, 11 Feb 2010 08:47:42 GMT
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Stefano Spataro wrote on Thu, 11 February 2010 07:47As I as writing before, lhe is based in 3D points -> XYZ.
In the case of SttHit this information is not available, and the helix fit transforms straw hits into point of closest approach to the central wire, used by lhe for the finding.
Maybe one could write an "ideal" stt helix hit producer, which does not take the reconstructed PCA but the MC point -> points for the finder, hits for the fitter.
But I am not so sure if this is want we want/need.

I see. In any case we need to understand what the origin is of the loss in efficiency. I understand that most probable it is related to the (x,y,z) reconstruction for the STT that troubles the helix fit. It would, nevertheless, be nice to confirm it in some way or the other. What about comparing directly with the track finding code of Gianluigi? That is available now and should be easy to do, right?

Greetings,

Johan.