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Subject: Re: PndLhePidTrack

Posted by [donghee](#) on Wed, 14 Apr 2010 22:14:31 GMT

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Dear Stepano,

I have made small test with the electron in the  $90 < \theta < 100$  (degree) range and 0.5 GeV to 1.5 GeV momentum.

PndPidCorrelator have been used and compared with generated one.

Different interaction region  $z=0$  and  $z=5\text{cm}$  are tested and the results looks reasonable.

If interaction point is moved to  $z=5\text{cm}$ , 92-94 degree could not reconstructed well, because of positioning of target pipe and absent of barrel layer of MVD.

But I do not understand clearly on the general concept of tracking procedure with shifted interaction region.

As far as I understand, hits of every detectors are only important for the tracking.

If final vector components are pointed back to vertex position and the tracking is surely correct, then origin of tracks can correctly find, even though real vertex position is moved to few cm. So, in some sense the tracking is independent from vertexing.

Is this statement also valid in LHEtracking task?

or do I have to consider some assumption of vertex position to  $z(0,0,0)$  in the tracking, specially in LHE?

Thanks,  
Donghee

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## File Attachments

- 1) [LHE\\_tracking\\_z\\_00.eps](#), downloaded 322 times
  - 2) [LHE\\_tracking\\_z\\_05.eps](#), downloaded 333 times
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