Subject: Re: PndLhePidTrack
Posted by donghee on Fri, 23 Apr 2010 11:55:14 GMT
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Dear Stepano and Christian,

Many of us is now pointing and understanding that the pattern recognition of track finding is strongly depends on the initial vertex position. If the primary vertex is moved to some way around from 0,0,0, then each detector part can not effectively find one of track.
Consequently, resolution would be drop down in the pid of lhetracking.
I cannot understand also, why are there 764 tracks in the distribution for 4,4,4 and much less in the 0,0,0 distro.
In my point of view tracking efficiency of (4,4,4) must be worser than (0,0,0).

I guess that it is not only related LHE tracking, but also the tracking of each single piece of every detector are strongly connected. One cannot simply introduce and modify something like an option for different position of interaction point for track finding in the lhetracking.
A single track from each detector must to be found with moved vertex at first, then global hits can be defined in the lhetracking efficiently. That's mean that one have to modify every detector part before building one track in lhetracking.
I think that is quite huge stuff.

My question is whether one can handle the interaction point directly in lhetracking or have to have some improvement of track finidng from every detector piece with moved point at first.

Best wishes,
Donghee