
Subject: Re: Update of lhetrack
Posted by [asanchez](#) on Wed, 07 May 2008 12:03:53 GMT
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Dear all, i have done some modifications in tof
so that the tof detector can be added to lhetrack without problems(it doesn't crashes)

One can operate either with TofPoint or with TofHit.
Of course if one uses the TofPoint the result after tracking and fit
is nicer(see picture below) than by using the TofHit information.

To create the hit, i have made some approximation to calculate the
time at each edge of the scintillation bar(as it was measured by a tdc), so basically hit provides
the position coordinates of the center of the bar in the xy plane, and the z coordinate is
determined by using the time difference (photon arrival time)measured by tdc.

Of course the position resolution will be much worse than
mvd or tpc.

Here you are two pictures in which tofPoint and TofHit was considered respectively.

So i don't know if it is a good idea to add the tof information
to the tracking.

I think that for pid with tof, geane should be used to match the track with tof hits and get the
corresponding tof, and then try to calculate the total length.
best regards

File Attachments

- 1) [pTlheTofhit.eps](#), downloaded 509 times
 - 2) [pTlheTofPoint.eps](#), downloaded 437 times
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