
Subject: Pid by SideTof

Posted by [Shyam Kumar](#) on Thu, 26 Jun 2014 02:51:38 GMT

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Hi,

I have read the class PndPidFtofInfo.cxx, I have some points not clear, the track propagation through GeanePro is taken from primary vertex for primary tracks, Is the vertexrec for calculating the tracklength of secondary track?. What is exact meaning of tofGlength and TofQuality?. why all the members are initialized with z coordinate as a negative number (-10000)?

Thank you

Shyam

Subject: Re: Pid by SideTof

Posted by [Stefano Spataro](#) on Thu, 26 Jun 2014 08:36:13 GMT

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The path lenght is calculated from point of closest approach to the interaction point, it is not recalculated for secondary vertices.

tofGlength is the propagation distance calculated by Geane.

TofQuality is the distance (squared) between the tof hit and the extrapolated hit from the track. The variables are initialized to such big negative number since it is not possible.

Subject: Re: Pid by SideTof

Posted by [Shyam Kumar](#) on Thu, 26 Jun 2014 08:46:15 GMT

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Thank you for reply

Subject: Re: Pid by SideTof

Posted by [Shyam Kumar](#) on Sun, 20 Jul 2014 07:59:15 GMT

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Hi Stefano,

I have a doubt why there is so much variation in the cut for Barrel Tof (TofCut:Float_t 25.) and Ftof (FTofCut:Float_t 2500.). The tof quality in the end is the square of distance between hitposition and the Geane extrapolated point. In the case of Btof we will set values if extrapolated point is with in the distance of 5cm but for Ftof we will set the values if the extrapolated point is with in distance 50 cm (larger) of actual hit. Is kalman filter will automatially take care of that in filtering part?

Thank you
Shyam

Subject: Re: Pid by SideTof
Posted by [StefanoSpataro](#) on Sun, 20 Jul 2014 17:47:30 GMT
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All the correlation cuts are not optimized, then I would not be so much surprised. If you want to improve such parameters, it would be good.
The kalman filter is not used in the correlation part.

Subject: Re: Pid by SideTof
Posted by [Shyam Kumar](#) on Mon, 21 Jul 2014 01:19:34 GMT
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I will try to optimize that cuts.

Thank you
shyam
