Subject: Mass analysis

Posted by Ajay Kumar on Tue, 08 Jan 2013 07:42:27 GMT

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Hi Everybody,

First of all I would like to wish a very happy new year to all.

I have to do mass reconstruction for lambda and anti lambda as a part of my analysis. for that I found a example macro and got Idea how to do this job. on execution of this example macro I am able to reconstruct mass of lambda after combining its decay product particles.

Somehow I could not understand that what exactly GetLength() function is doing here. I have gone through TCandList class then I see that it returns no of tracks.

But in my case where lambda decays to proton and piminus, essentially it will tells us about the lambda tracks after the combination of both product particles.

we are doing event wise analysis, surely we will have only one track for lambda. I am not getting why we are applying one for loop over the lambda raw mass.

Can anybody explain me that what is exactly GetLength() function is doing here?

I have attached my analysis macro with this mail.

## File Attachments

1) lambda\_lambdabar.C, downloaded 226 times

Subject: Re: Mass analysis

Posted by StefanoSpataro on Tue, 08 Jan 2013 16:14:29 GMT

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GetLength() is the size of your candidate lists, then how many particles/combinations you have inside the TCandList.

Subject: Re: Mass analysis

Posted by Ajay Kumar on Mon, 14 Jan 2013 14:16:04 GMT

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Dear Stefano,

Thanks for your reply.

I have to clear one doubt, if there is five protons and five pions, after combination we will get 25 lambda tracks.

Is it like this?

Thanks in advance.

Subject: Re: Mass analysis
Posted by StefanoSpataro on Mon, 14 Jan 2013 14:18:35 GMT
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In theory, if you do not apply cuts, you should have 25 combinations.