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Subject: Re: Psi analysis as a cross check from donghee kang  
Posted by [Gianluigi Boca](#) on Thu, 18 Aug 2011 11:09:47 GMT  
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Hi Donghee, Lars and others.

I have a request to Donghee and a comment to Lars and all the other TPC guys.

Donghee, do you have time to plot the effective masses for the Stt in the cases when you have 2, 3, 4, ....., 10 hits minimum?

I am curious to see if the mass resolution changes with the number of hits.

Comment to Lars and the TPC guys.

If I understand how the TPC works, it is necessary to have a certain track length in the TPC for the reconstruction, otherwise it doesn't work (am I right Felix ?)

The STT can work also with less points (actually in PR at least 2).

Instead of banging all the time on the number of hits in the Stt, why don't we have the results of TPC+Mvd to compare with Stt+Mvd ? That makes more sense instead of trying to reduce 'artificially' the STT efficiency with hits requests and complaining that we quote the STT+Mvd pattern recognition.

On the other hand, if the TPC people think they are better off not using the Mvd system, then it is their choice and they must live with their track length requirement.

Nevertheless some day we need to see how the TPC+MVD system works. We need also to see how well the matching TPC/Mvd works in realistic conditions and with which efficiency.

Last remark : I am modifying the code to turn off (if the user wants) the part of the STT+MVD Pattern Recognition that starts from Mvd hits and goes to STT.

This part of the code was criticized lately, so soon users can not use it if they want.

Gianluigi

Lars Schmitt wrote on Thu, 18 August 2011 11:24Dear Donghee,

Your results are very instructive. This means that the efficiencies of TPC and STT in reconstructing tracks are actually similar, since the TPC asks for a minimal track length. If this would correspond to something like 7 hits in the STT the resulting efficiencies would be the same.