Subject: Re: Lambda Lambdabar simulations
Posted by donghee on Wed, 16 Apr 2014 09:00:03 GMT
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Hi Bertram,

Quote:
How are such long living particles treated in the fast simulation?

In full simulation, we could not handle correctly V0 decay, because of no V0 track reconstruction at this moment as it is well known.
Therefore acceptance for lambda and lambdabar is quite poor and roughly below 20% without any PID application.
In the fast simulation, the situation seems to be same. If lambda and lambdabar has a long distance life time, then we do not chance to reconstruct those track in the fast simulation, too.

Quote:
For the Physics Book studies we therefore defined the lambda as a stable particle in the event generator. The decay has been considered afterwards in the GEANT simulation.

Your comment about stable mode in EvtGen is very interesting for me, You mean that we can also use stable mode in EvtGen generator.
I know the stable mode for lambda or K_s in DPM, but I have never heard such handling in EvtGen.

Presently in my EvtGen generator frame, lambda-lambdabar has been produced and allow directly charged decay mode(to proton and pion).
Then all final state particles are transfered to the GEANT.

Could you tell me about difference between you and my approach?

Best wishes,
Donghee