
Subject: Re: Lambda Lambdabar simulations

Posted by [Bertram Kopf](#) on Tue, 15 Apr 2014 13:19:40 GMT

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Hi Donghee,

one specific issue of the analysis of this channel is the long lifetime of the lambda particle. 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. Therefore my question:

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

Are the displaced vertices properly reconstructed? The path length of the lambda is in the order of several cm up to appr. 1 meter! BTW: By applying a cut on this path length of more than a few cm it should be possible to get rid of most of the background events. As Karin already mentioned, cuts on PID information seem to be not necessary for this channel.

Best regards,
Bertram.