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Subject: Event filtering for lambda and lambdabar in DPM

Posted by [donghee](#) on Thu, 03 Apr 2014 22:20:31 GMT

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Hi Martin,

There are many of Lambda and Lambdabar events in DPM data at any beam momentum. That is some problem for the estimation of lambda efficiency using DPM.

We should take into account the fraction of lambda and lambdabar event and can subtract them according to DPM lambda fraction.

But I want to directly exclude those event in order to compare correctly the efficiency and background reduction using DPM sample without lambda event and EvtGen data from pbar p -> Lambda Lambdabar production.

The procedure should be a veto of lambda and lambdabar.

You have implemented already such feature only for positive event selection in DpmDirect.

Could you show me the fast/effective way to reject them in the DPM production? I remember that you have an idea about that.

But I cannot see the method for veto.

Quote:

```
FairEvtFilterOnCounts* fil= new FairEvtFilterOnCounts();
primGen->SetFilterMaxTries(999999);
fil->AndMinMaxPdgCodes(0,5,211,-211); // max. 5 pions
fil->AndMinMaxPdgCodes(1,10,111); // min. 1 and max. 10 pi0
fil->AndMinMaxAllParticles(0,14); // max. 14 particles in total
fil->AndMinMaxCharge(1,5,'+'); // min. 1 and max. 5 pos. charged
primGen->SetVerbose();
fil->SetVerbose();
primGen->AndFilter(fil);
```

Thank you in advance!

Best wishes

Donghee

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