Subject: Re: pbarpSystem

Posted by Elisabetta Prencipe (2) on Tue, 06 Aug 2013 22:21:39 GMT

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Hi Simon,

to simulate a new particle with EvtGen you can use the particles listed as 'dummiesXX' in the file evt.pdl. For instance, let's assume that you want to simulate a particle called Y, with mass = A, width = B, spin and charge set up to 0 (remember to pass the values of mass a width in [GeV]). Then you need to do the following in your file.dec:

Particle dummy00_1 A B
ChangeMassMin dummy00_1 [min-mass-value]
ChangeMassMax dummy00_1 [max-mass-value]
#
Alias MyY dummy00_1
Decay MyY
1.0 [daughter-one] [daughter-two] [daughte-whatever] [model]
Enddecay

Indeed, if you need to simulate a new particle of spin 1 and charge =0, then you need to use 'dummy01_1' in your file.dec; you can find the list of all dummy particles available in the file evt.pdl. By default, the dummy00_1 gives you a LundID = 51.

I hope it helps, Elisabetta