Subject: DPM theta cut off
Posted by donghee on Mon, 27 Aug 2012 14:49:11 GMT
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Hello DPM expert,

I have couple of questions for DPM generator.

Now I'm trying to evaluate contributions of inelastic and elastic part from DPM generator with a particular beam momentum.

I used theta_min 0.01 degree for inelastic plus elastic mode during the DPM generation.
When I try to calculate the ratio of cross-section between total and elastic in DPM. I have too high elastic contribution due to
small theta cut off. (I'm now understanding theta_min in DPM direct represents theta cut off.)
Which kind of theta cut off value do I have to introduce to get correct ratio, which is pronounced in many reference, for instance, beam momentum 15GeV/c case the elastic cross section must to be 10mb.
I'm also wondering wheather the elastic cross section of 10 mb has been taken into account the coulomb contribution in the reference?[K.Nakmura et al. (PDG), J.Phys.G 37, 075021 (2010)]

I assume that coulomb and interference part of elastic process are used in the DPM model.
In order to make correct ratio between elastic and inelastic part, I have to apply correct theta cut off value during the generation in my understanding.

Thank you for your teaching in advance.
Donghee