Subject: New version of DPM

Posted by Aida Galoyan on Thu, 03 Sep 2009 14:14:22 GMT

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Hi all,

I have commited new version of DPM generator.

Full elastic scattering, Coulomb, interference, hadronic parts are included in the new DPM.

You need to put the minimal angle of scattering -"tetmin"(>0) at DPM running, if you give value of parameter

"Elastic" = 1 (Inelastic with Elastic scatterings)

or = 2 (only Elastic scatterings).

The implementation of full elastic scattering in DPM is important for Luminosity monitoring and, may be, for estimation of radiation doses in MVD.

Aida

Subject: Re: New version of DPM

Posted by Mohammad Al-Turany on Thu, 03 Sep 2009 19:58:36 GMT

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Hi,

This change is also propagated to the PndDpmDirect class, i.e:

PndDpmDirect(Double_t Mom, Int_t Mode, Float_t tetmin=0)

The constructor of the PndDpmDirect has now an optional parameter tetmin. In case one choose elastic (Mode=1 or 2) and the theta is not set by user a warning will be printed out and the value is set to zero!

regards

Mohammad

Subject: Re: New version of DPM

Posted by Marius Mertens on Thu, 24 Sep 2009 15:48:07 GMT

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Hi Aida.

thanks for uploading the new DPMGen version!

I have a question regarding the cross sections for the different processes (to my understanding

inelastic, strong elastic, coulomb elastic) you implemented.

When I generate a given number of events with DPMGen, requesting elastic and inelastic events at a fixed parameter set, how many of these events will be inelastic, strong elastic, coulomb elastic?

Additionally, I have the same question concerning the previous DPMGen version without coulomb interaction: For a fixed number of events, how many of them will be elastic and how many inelastic?

Best regards,

Marius

Subject: Re: New version of DPM Posted by Aida Galoyan on Fri, 25 Sep 2009 13:11:11 GMT View Forum Message <> Reply to Message

Hi Marius,

please, send me your e-mail address, and I can send you a version of programm codes to receive information for cross-sections of Coulomb, Interference and Hadron parts of elastic scattering. There are some "print" operators in fortran codes.

If I put corresponding "print"s of your required values in fortran codes in current version DPM and commit it, it will be crushed, because option "Ig2c" is removed from "binmarke Fortran.mk" file.

So, I can send you the needed files separately and explain how to use them.

best regards, Aida

Subject: Re: New version of DPM Posted by Marius Mertens on Mon, 28 Sep 2009 09:59:53 GMT View Forum Message <> Reply to Message

Hi Aida.

thanks a lot! You should have received an email from me via the forum system in the meantime. If it didn't work for some reason, please let me know.

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