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
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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 "lg2c" 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
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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.