Subject: DPM weird t spectrum (random problem)
Posted by Stefan Pflueger on Mon, 17 Sep 2012 15:30:37 GMT
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Hi,

I'm obtaining very strange data, when using the standalone version of DPM (settings: tmin 0.025 degrees, only the elastic part).
I attached two plots showing this. Both show the -t distribution. dpmprob-125binning shows the distribution with a binning of 125, because the effect is the most dramatic in this case. For dpmprob-400binning a few single outliers are present...

Am I missing something?

Best regards,

Stefan

File Attachments
1) dpmprob-125binning.pdf, downloaded 511 times
2) dpmprob-400binning.pdf, downloaded 510 times

Subject: Re: DPM weird t spectrum (random problem)
Posted by StefanoSpataro on Mon, 17 Sep 2012 16:13:27 GMT
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I found strange that with a higher binning the effect disappears, while with a worse binning you can see such obscillations, are you sure you don't have some bug in the macro? Maybe something connected with rounding?

However, Aida Galoyan is doing the DPM manteinance, so maybe you can contact her, I am not sure of she reads the forum.

Subject: Re: DPM weird t spectrum (random problem)
Posted by Stefan Pflueger on Tue, 18 Sep 2012 15:30:38 GMT
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Hi,

yeah this made me wonder as well. I think my program/macro should be bug free. Anyways, I changed the DPM code to use 8 byte reals instead of 4 to gain some precision and that seems to cure the outlier problem. I guess that that my tiny t range compared to the full dpm generated t range scratched the resolution. I'll pass that information to Aida.

Stefan