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Subject: Re: Changing t distribution slopes

Posted by [Michael Kunkel](#) on Tue, 23 Aug 2011 15:51:54 GMT

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Quote:And it could be (this is only a first guess) that the shape of the angular distribution is different for the various beam energies, whereas the macro tries to match always the same shape as a function of t. (Btw., is it really true that this function is the same for all energies?)

I'm going to go out on the limb here and say yes this is true, the t-dependence is independent of beam energy, however the t-dependence is dependent on  $M(\pi^+\pi^-)$  mass. Using this assumption I researched some papers on rho photoproduction for various beam energies and found this true. There are other models (Sodel model and Drell model) in which this assumption is not true.

I am going to write a macro that samples a normalized beam smearing function, incorporates the number of events the user wants and in what binning the user wants, and produces several macros for the desired result. The user then will have to hadd the output together to get the full distribution, but this avoids the cumbersome lag of using the current method.

What do you think?

Regards  
Michael

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