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Subject: Re: Bear Smear and Cross Sections  
Posted by [Michael Kunkel](#) on Fri, 24 Aug 2012 17:32:42 GMT  
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Thanks for showing me my error.

A few more questions/observations.

I am unable to run macros unless I use the full path of PF2EvalBatch.h in the PScatterCrossSection.h

Error: cannot open file "PF2EvalBatch.h"  
/Users/Mike/Pluto/pluto\_v5.40.5/plugins/scatter\_mod/PScatterCrossSection.h:15:

Also, I am unclear on what SetNpx/y does. Looking in the code I see that on line 58  
if (npy>0) pf2->SetNpx(npy);  
Is this suppose to be SetNpx for npy? Could you also elaborate more on this functionality?

Also, beam smearing is not working with the PScatterCrossSection. I checked this by smearing the beam 1.1 -> 5.7 GeV in the lab, translating this to c.m. energy and generate. The lab beam distribution is flat, instead of a bremsstrahlung (1/x) function I input into beam smear, however the c.m energy is not flat(see below). I am sure I know a work around for this, but I thought I would bring it to your attention.

Lab Frame:

c.m. Frame:

And lastly,

Quote:

PS: Do not forget that the y-axis (a linear increase of \_f) was just dummy.

I do not understand this. Once I corrected my syntax for my double boost, I checked my distributed cos(theta) of the PLUTO generation. It looks like the input. (see below) Would you also elaborate more on on the meaning of your P.S.

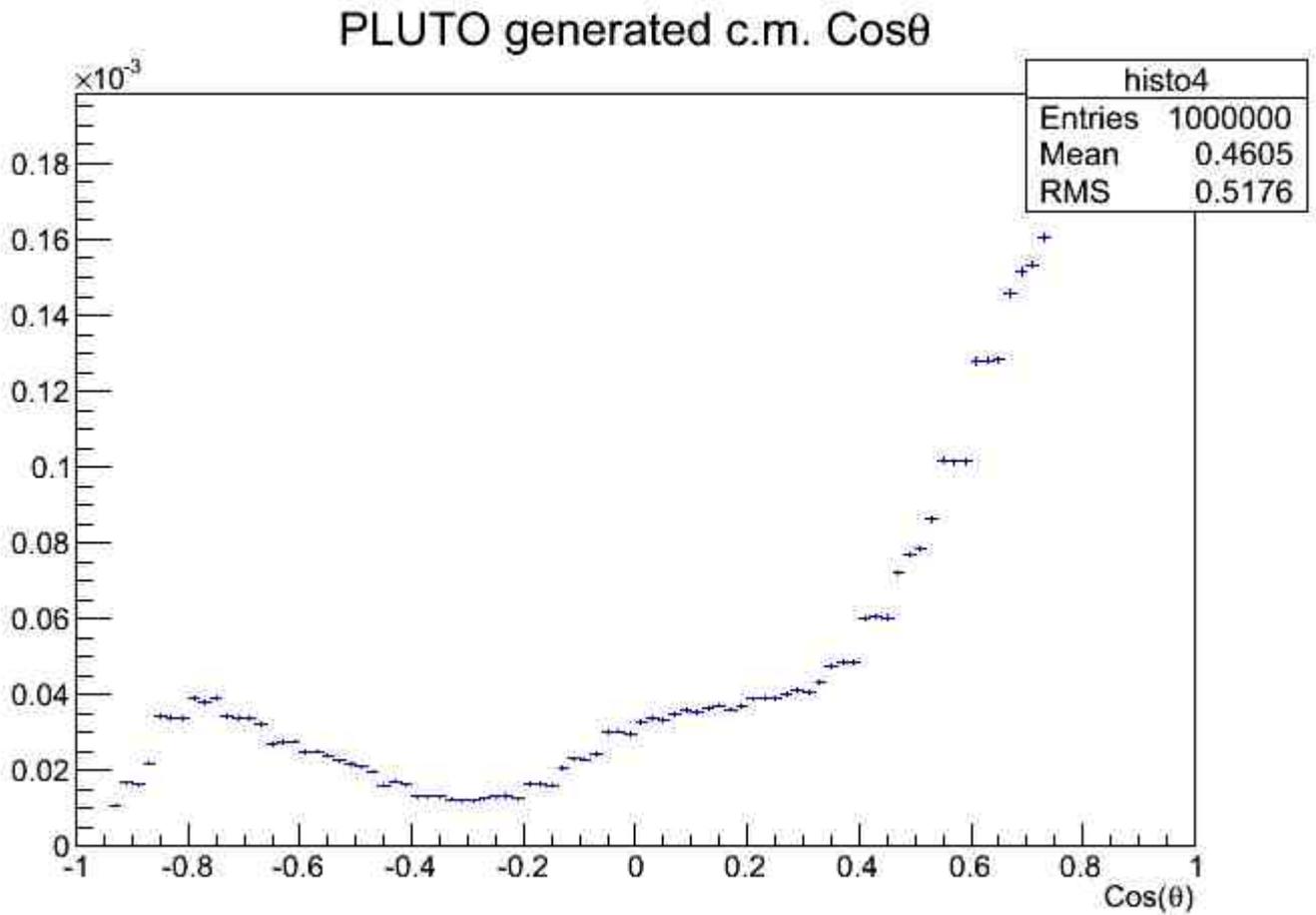
Thanks  
Michael

INPUT:

PLUTO OUTPUT:

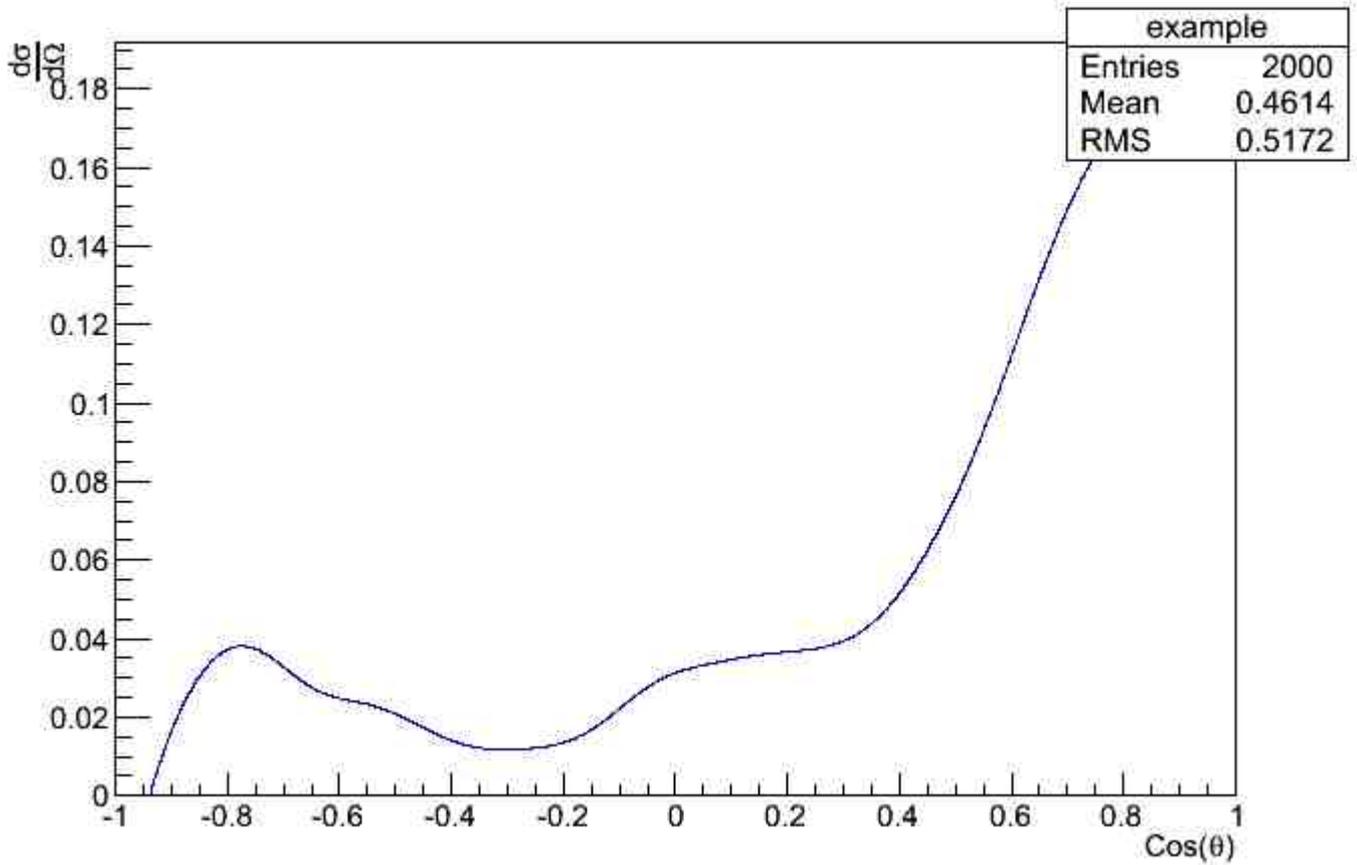
File Attachments

1) [PLUTO\\_generated\\_cos\\_theta.jpeg](#), downloaded 2044 times



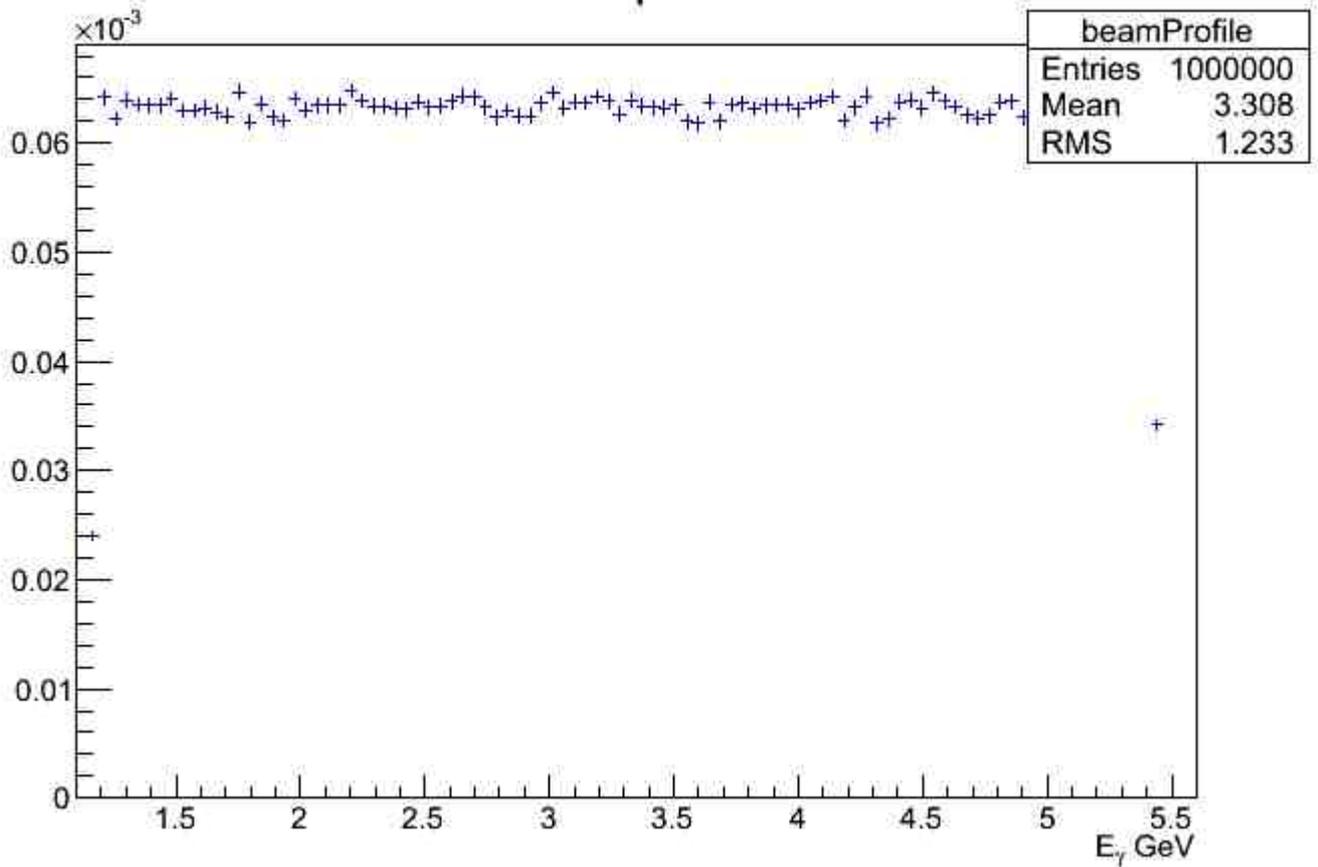
2) [XSection\\_Interpolated.jpeg](#), downloaded 2072 times

Extrapolated Differential Cross Section for  $\eta$  c.m. energy 2.2 GeV  $\rightarrow$  2.22 GeV



3) [Beam\\_Profile.jpeg](#), downloaded 2115 times

**Beam Spectrum**



4) [PLUTO\\_generated\\_cm\\_energy.jpeg](#), downloaded 2138 times

