Subject: [SOLVED] Beam Smearing
Posted by Michael Kunkel on Thu, 12 Apr 2012 17:43:32 GMT
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I simulated 1 giga eta dalitz events using a smeared photon beam.
The smearing was a brem 1/E function.
The commands look as

```
double ebeam_min = 1.1725;
double ebeam_max = 5.44575;
PBeamSmearing *beam_smear = new PBeamSmearing("beam_smear", "Beam smearing");

TF1* beam_smear_fn = new TF1("beam_smear_fn", "-3.82136e-03 + 7.24636e-02/x",
ebeam_min, ebeam_max);

beam_smear->SetReaction("g + p");
beam_smear->SetMomentumFunction(beam_smear_fn);
makeDistributionManager()->Add(beam_smear);

PReaction my_reaction("_P1 = 2.2","g","p","p eta [dilepton [e+ e-] g]","eta_dalitz",1,0,0,0);
```

The code compiles and runs correctly, however I see the following message "Warning in <PBeamSmearing::Init>: No smearing model found". Is this normal?

The reason I inquire about this is that after I create the PLUTO generated events, I run them through the JLab Monte-Carlo package, which is a GEANT based physics package. Afterward The reconstructed beam profile appears nothing like the actual data, nor does the leptons momenta spectrum. This is my first step in solving this.