

Double Arm Møller Cross-Section for Carbon Target

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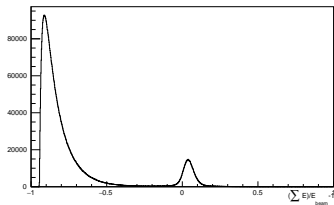
Properties:

- ▶ Density = 2.1
- ▶ thickness = 1 μm
- ▶ target thickness = $1.009 \cdot 10^{19} \text{ electrons/cm}^2$

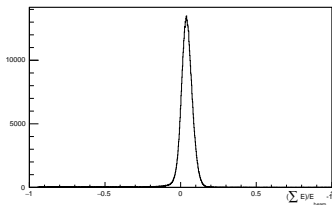
Cuts (wide):

- ▶ $|\Delta\phi| < 7 \text{ deg}$
 - ▶ $|z_{\text{vertex}}| < 200 \text{ mm}$
 - ▶ $|E/E_{\text{theo}} - 1| < 5(\sigma_E/E)$
- Need to quantify changes of cuts on the yield (not done yet)

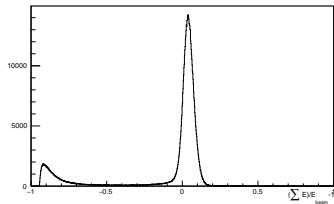
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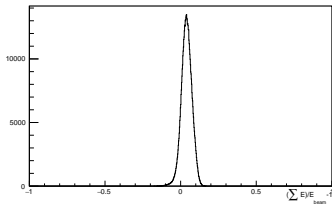
$\Delta\phi$ cut and Z_{vertex} cut



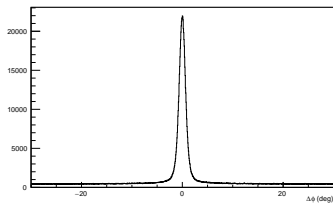
$\Delta\phi$ cut



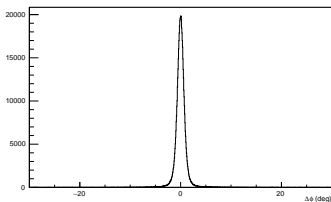
all cuts



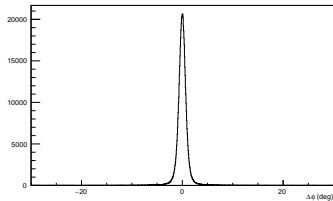
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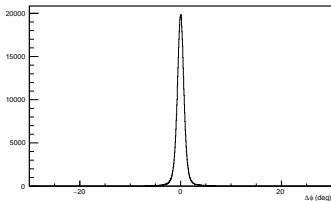
Z_{vertex} cut and elasticity cut



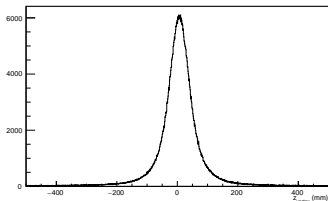
Z_{vertex} cut



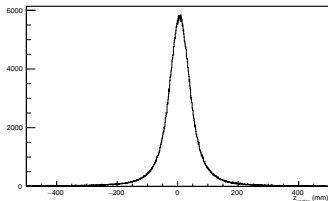
all cuts



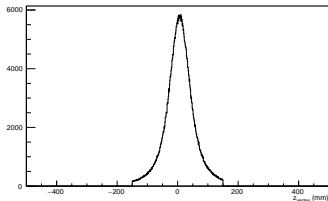
$\Delta\phi$ cut



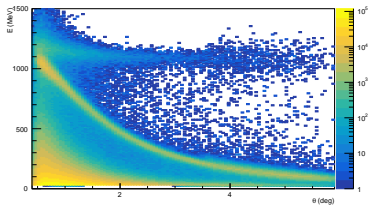
$\Delta\phi$ cut and elasticity cut



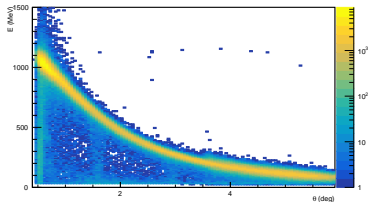
all cuts



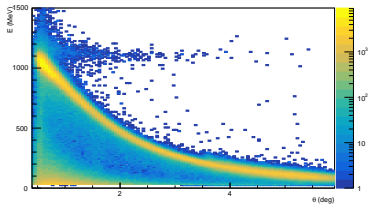
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$\Delta\phi$ cut and z_{vertex} cut



$\Delta\phi$ cut



all cuts

