Energy loss (based on c12-19-002)

- Changed left arm angle to 6.5 and right arm angle to 12.6
- Changed scattered electron momentum to 3.0 GeV/c (+/- 4.5%) and theta to 6.5 (+/- 1.5) deg
- Changed kaon momentum to 1.2 GeV/c (+/- 10%) and theta to 12.6 (+/- 4.5) deg.

Energy loss electrons before correction

Scattered electron z

Tritium target 0.4mm, Scattered electron momentum loss, Momentum = 3.0 GeV, theta = 6.5 deg



Energy loss electrons before correction

Scattered electron momentum loss vs x'







Energy loss kaons before correction



Energy loss kaons before correction

Kaon momentum loss vs Target z

Kaon momentum loss vs x'



Energy loss kaons before correction



Energy loss kaons fitted

Kaon momentum loss vs x'



Fit function upper: 2.594 +7.694 * x' - 14.42 * x'^2 - 53.62 * x'^3 +247.9 * x'^4 + 664.4 * x'^5 Fit function lower: 0.4063 - 0.124 * x'

Energy loss kaons after correction



Zbeam > 9.6 cm

Energy loss kaons after correction



Zbeam < 9.6 cm

Energy loss electrons before correction



Zbeam > 5.5 cm

Energy loss electrons fitted

Scattered electron momentum loss vs x'



Fit function upper: $1.561 + 11.04 * x' - 25.29 * x'^2 - 750.9 * x'^3 - 3620 * x'^4 + 4.113e+04 * x'^5$ Fit function lower: 0.4073 - 0.03633 * x'

Energy loss electron after correction



Zbeam > 5.5 cm

Energy loss electron after correction



Zbeam < 5.5 cm

summary

- The upper region of the energy loss was more spread out for the electron due to being changed to a more forward angle
- The shape of the kaon energy loss is basically unchanged
- The corrections had a similar result to reduce the sigma by half for the upper region (unchanged for the lower)
- The corrections does move each peak to zero