

# Cross sections, counting rates for $^{12}\text{C}(e, e)$ using MAINZ mefit

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Elastic scattering rates are high at  $12.5^\circ$ . Even at 2.649 GeV a  $50 \mu\text{A}$  beam should yield 1.3 million events in 1 hour.

$E_e$	$\sigma_{avg}$	$(1/l)(dN/dt)$
GeV	$fm^2/sR$	$s^{-1}\mu A^{-1}$
0.653	$0.841 \times 10^{-1}$	$1.32 \times 10^5$
1.343	$0.353 \times 10^{-3}$	555
1.996	$0.723 \times 10^{-5}$	11.4
2.649	$0.458 \times 10^{-5}$	7.2

Table 1: Average cross sections and rates for  $^{12}\text{C}(e, e)$  elastic scattering at  $12.5^\circ$  using the MAINZ mefit code. Note that the rates are per  $\mu\text{A}$ . Target thickness is 0.3mm at  $30^\circ$  with respect to the beam. Cross sections are averaged over the spectrometer entrance aperture.