KaonLT Meeting

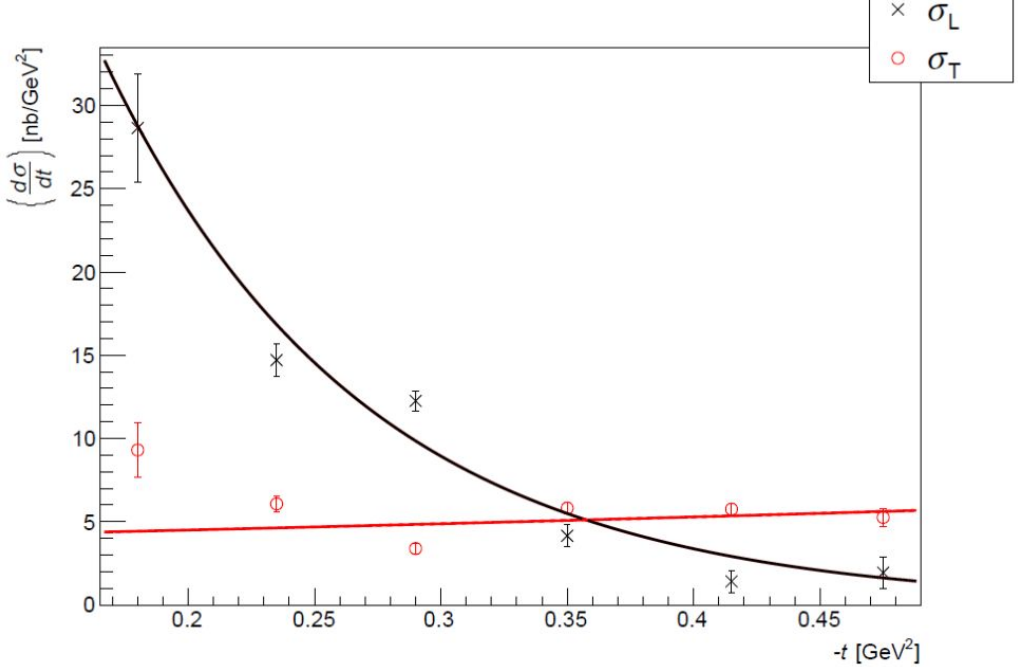
May 23rd, 2024

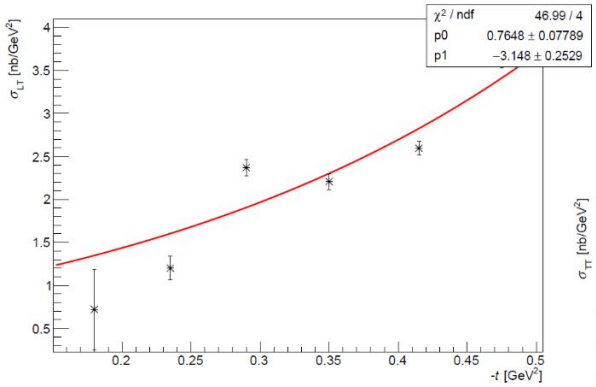
Richard Trotta

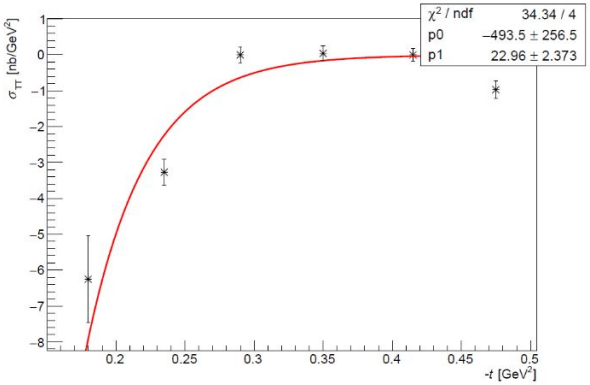
Q^2=3.0, W=3.14

t=0.15-0.5

17 iterations







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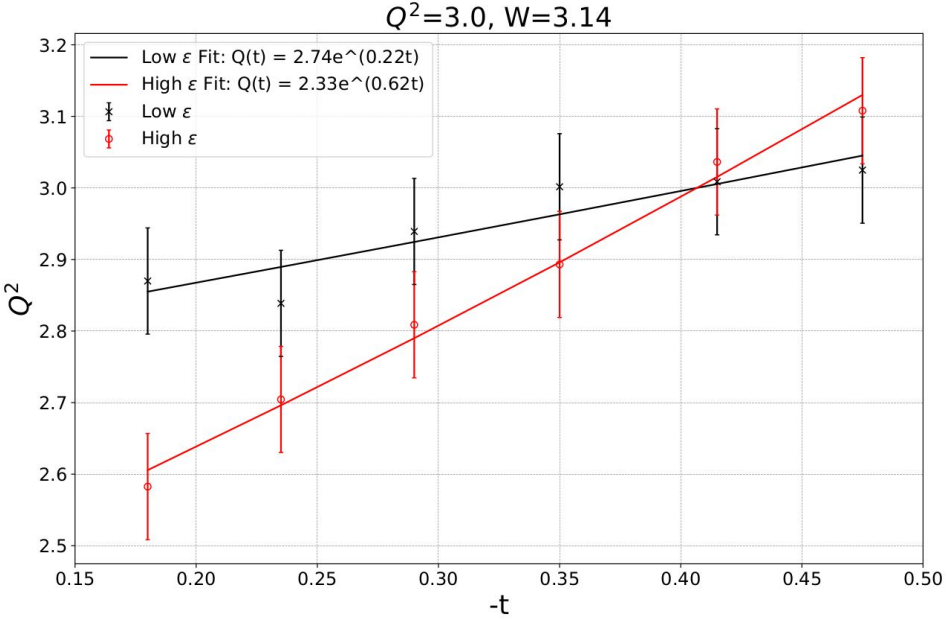
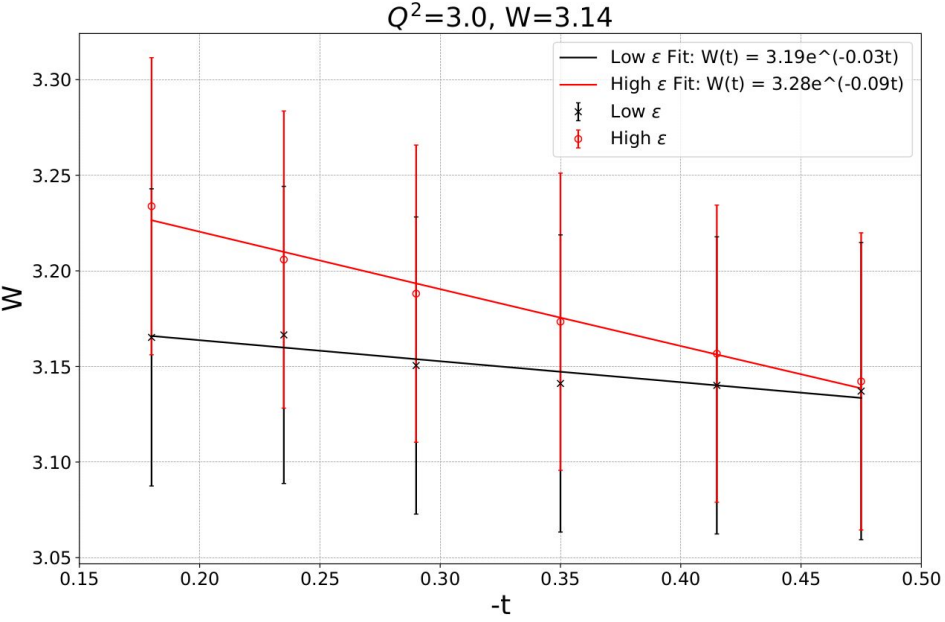
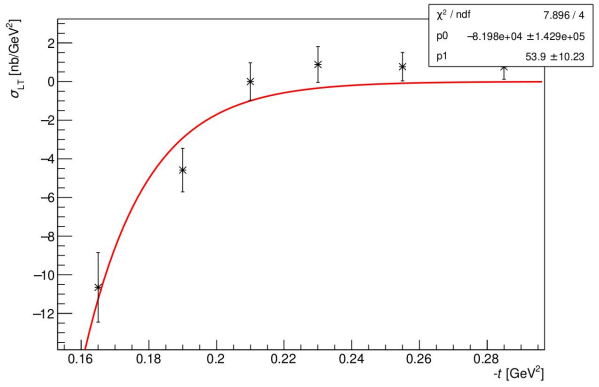


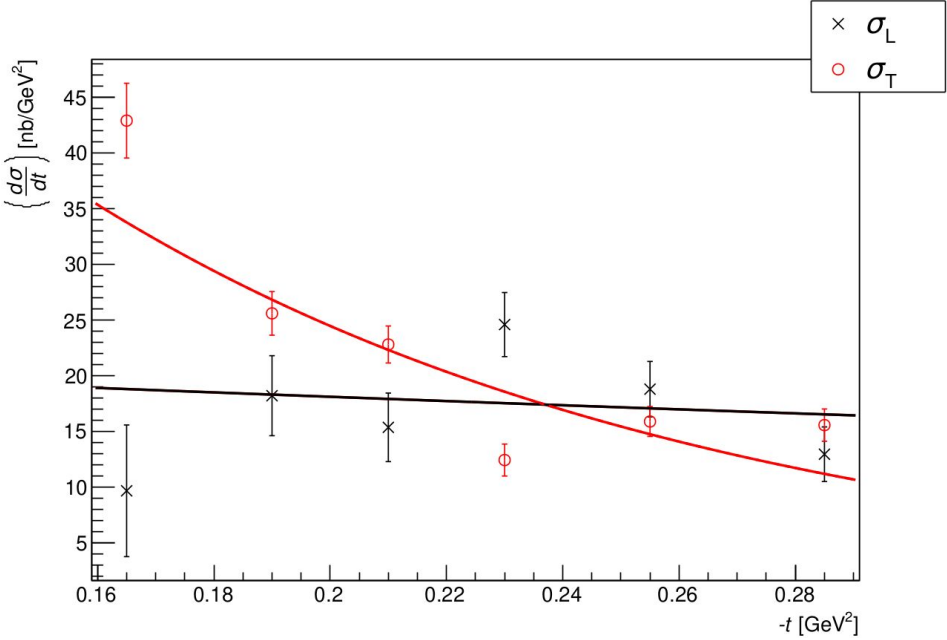


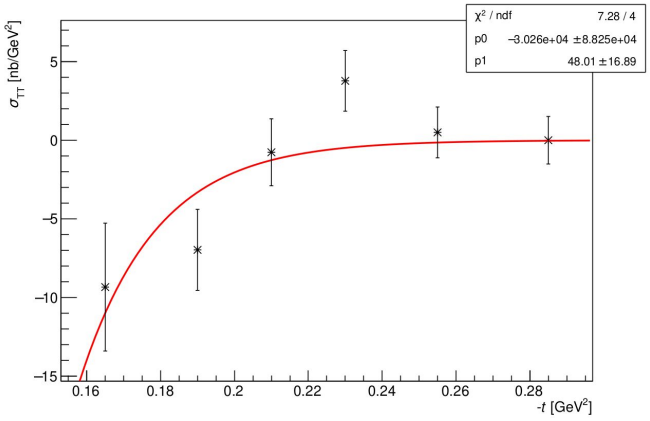
Q^2=2.115, W=2.95

t=0.15-0.3

***0 iterations







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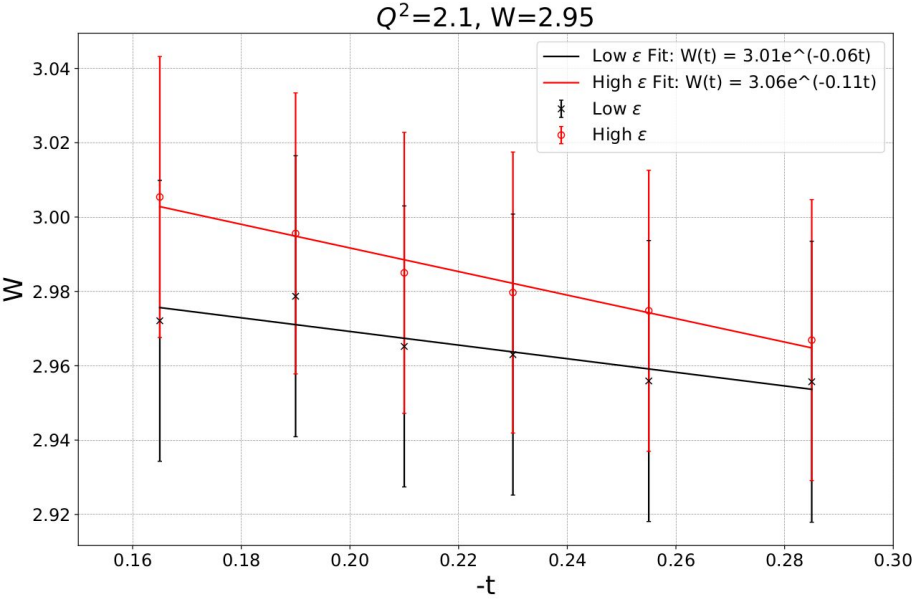
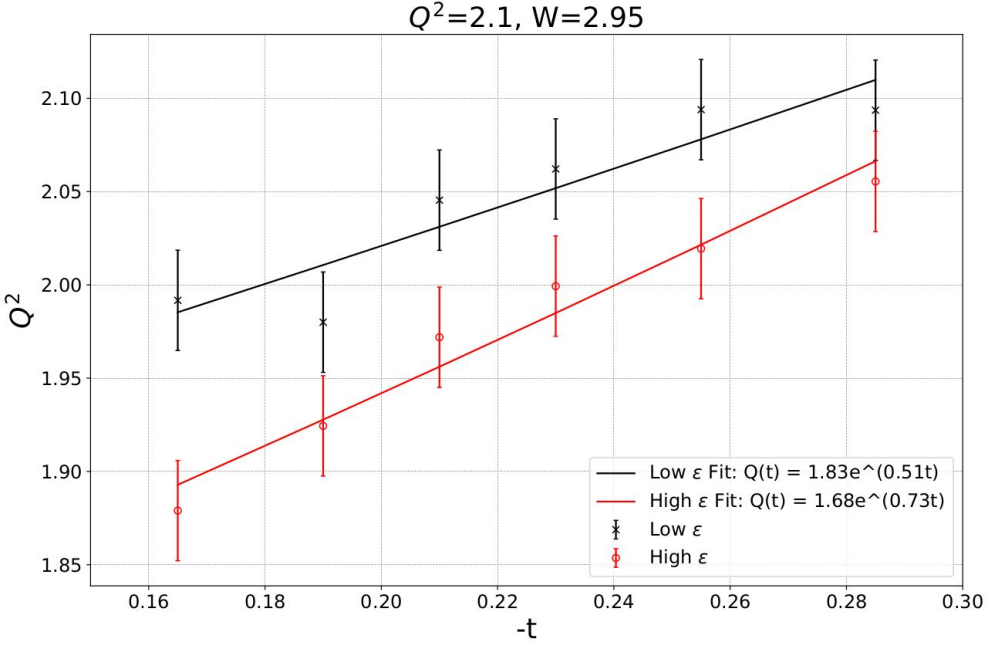
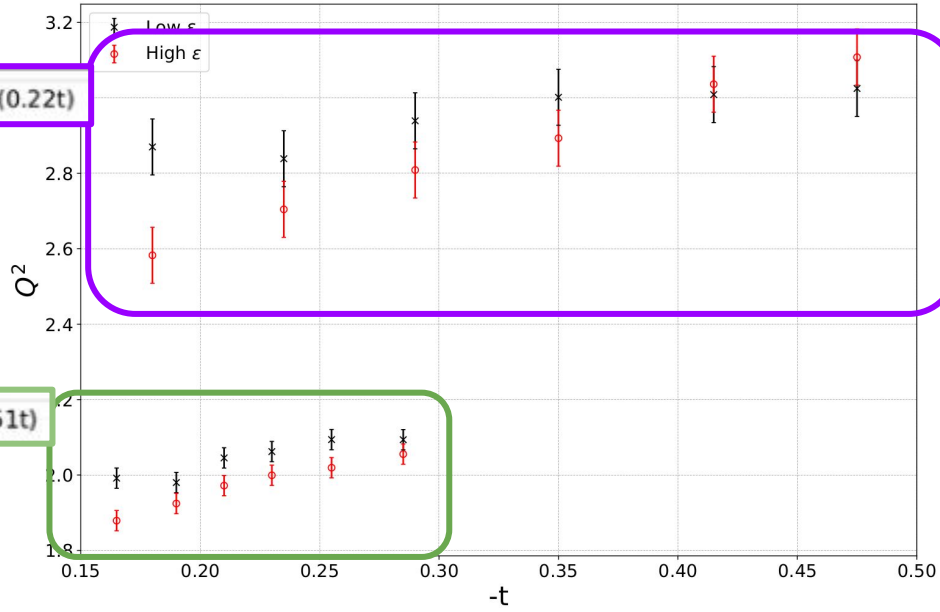
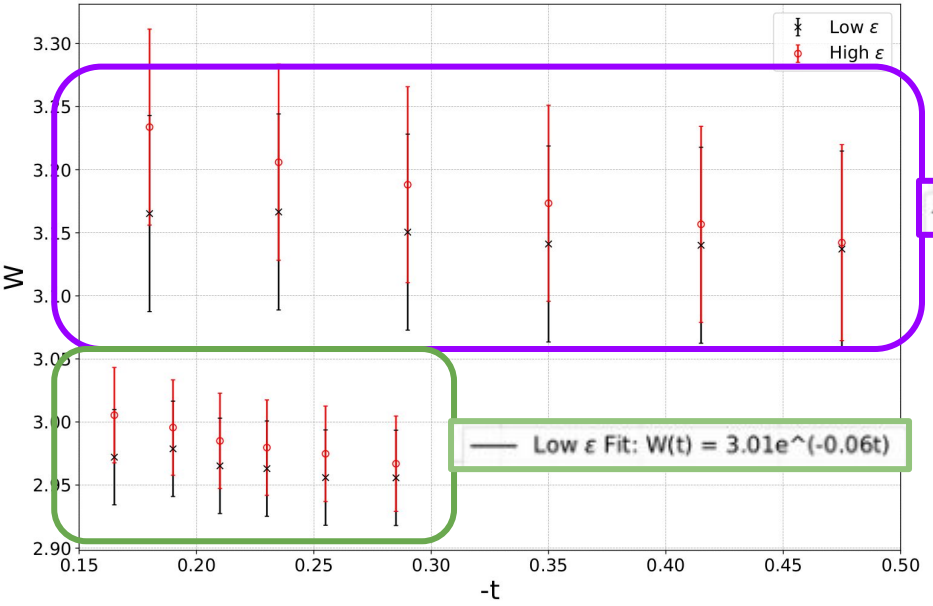




Q^2=3.0, W=3.14

Q^2=2.115, W=2.95





$$\sigma_L = g(W) \cdot (\mathrm{p1} + \mathrm{p2}\log Q^2) e^{(\mathrm{p3}+\mathrm{p4}\log Q^2)\cdot|-t|}, \quad [5.4]$$

t-avg for all Q^2

$$\sigma_T = g(W) \cdot [p5 + p6 \cdot \log Q^2 + (p7 + p8 \cdot \log Q^2) \cdot \frac{|-t| - (0.1112 + 0.0066 \cdot \log Q^2) \cdot Q^2}{(0.1112 + 0.0066 \cdot \log Q^2) \cdot Q^2}], \quad [5.5]$$

Separated Response Functions in
Exclusive, Forward $\pi^{\pm}$ Electroproduction on Deuterium

arXiv:1412.5140v1 [nucl-ex] 16 Dec 2014

$$\sigma_{LT} = g(W) \cdot (\mathrm{p9} e^{\mathrm{p10}\cdot|-t|} + \frac{\mathrm{p11}}{|-t|}) \cdot \sin\theta_{CM}. \quad [5.6]$$

$$\sigma_{TT} = g(W) \cdot (f(t) \cdot \frac{\mathrm{p12}}{Q^2} e^{-Q^2}) \cdot \sin^2\theta_{CM}, \quad [5.7]$$

Needs to adapt xsect functions with…

- Q^2->Q(t)=Ae^(Bt)
- g(W)
  - W(t)=const.
  - W(t)=mt+b