Quick n' Dirty Cross Section Calculation

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Using Nathaly's XEMC Code
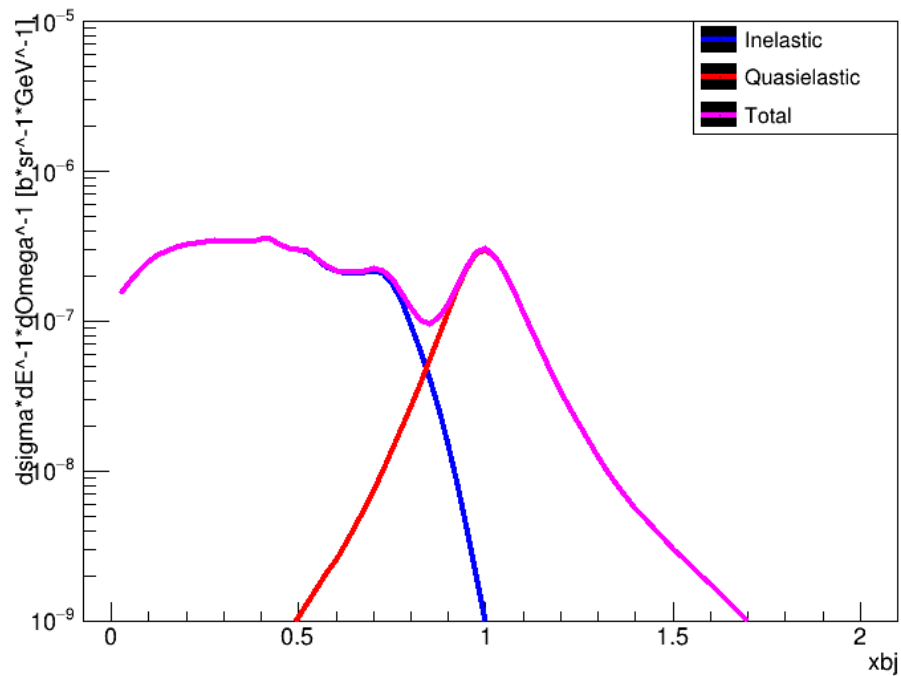
- C++ wrapper for Bosted fortran code
- Parameterized by E_0 and θ

b1	E_0 [GeV]	θ [deg]
SHMS	6.70	7.35
SHMS	7.45	8.96
SHMS	7.96	9.85

Azz	E_0 [GeV]	θ [deg]
SHMS	8.8	8.2
SHMS	6.6	7.5
SHMS	2.2	10.9

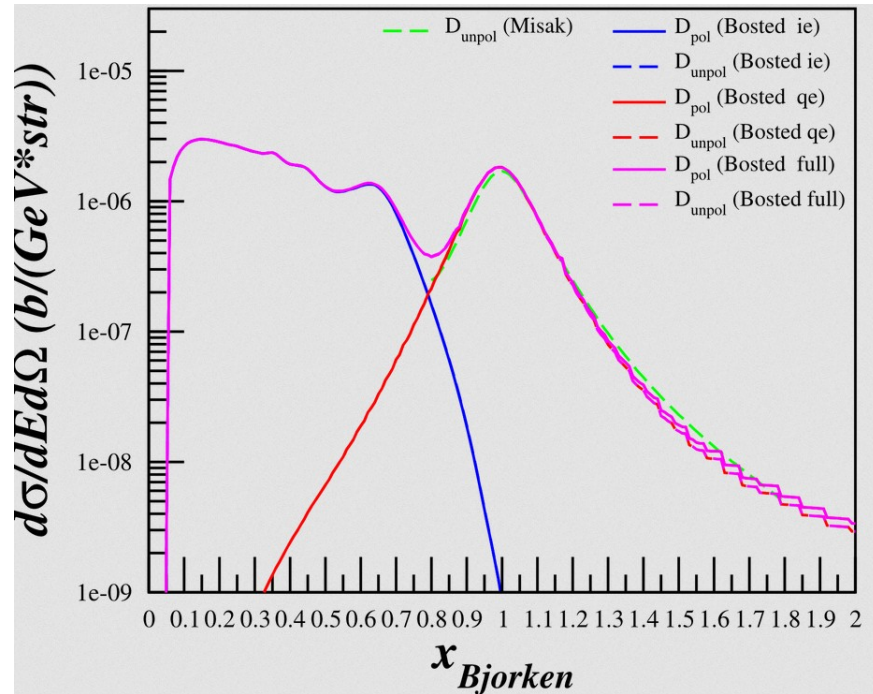# Experimental Cross Sections
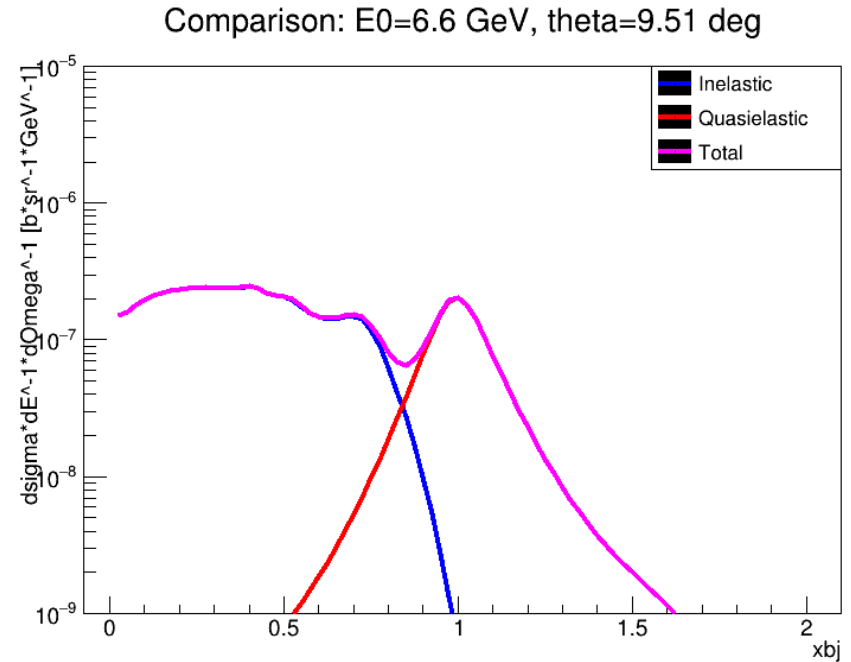
b1: E0=7.96 GeV, theta=9.85 deg

Azz: E0=8.8 GeV, theta=8.2 deg
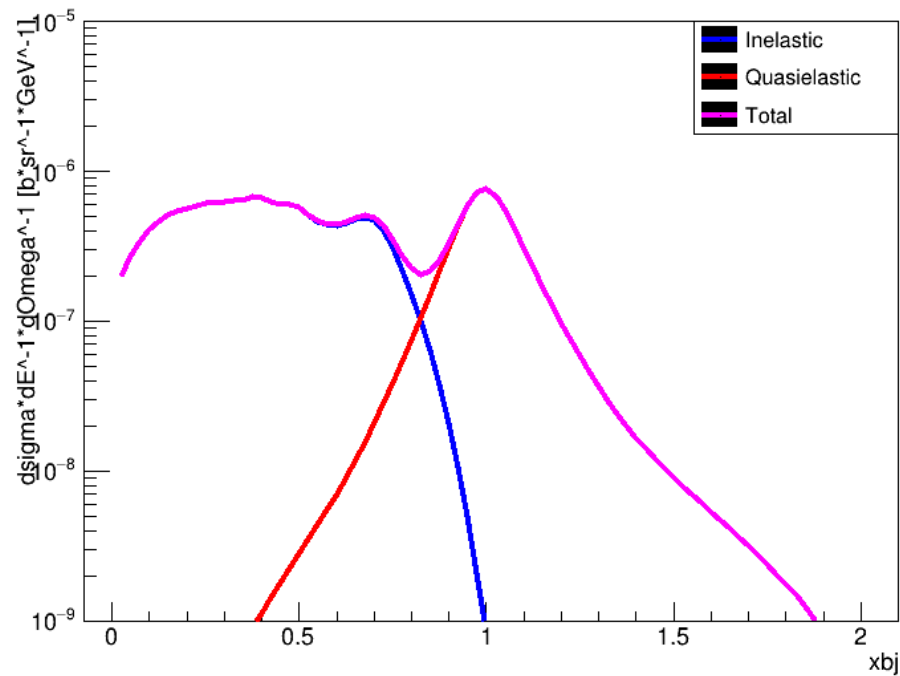
Comparison with Rates Calc

E. Long rates code 2014-03-25

A. Zec with XEMC 2022-06-14

Active Issues

- Some kinematics still producing NaNs… why?

  - Probably looking at vanishingly small cross sections in elastic region (need to confirm this)

- Order-of-magnitude difference from cross-section calcs performed previously

- Not yet ready for implementation into simc or similar simulation