

John's HV vs. LD univereal functions

High-Virtuality (HV)

$$f_{\text{univ}} = \frac{R_{\text{EMC}} - \frac{2(Z-N)}{A} \frac{F_2^p}{F_2^d} - \frac{2N}{A}}{a_2 - \frac{2N}{A}}$$

High Local Density (LD)

$$f_{\text{univ}} = \frac{R_{\text{EMC}}^{\text{iso}} - 1}{R_2 \frac{A(A-1)}{2ZN} - 1}$$

John's HV vs. LD univereal functions

High-Virtuality (HV)

$$f_{\text{univ}} = \frac{R_{\text{EMC}} - 1}{a_2 - 1}$$

High Local Density (LD)

$$f_{\text{univ}} = \frac{R_{\text{EMC}}^{\text{iso}} - 1}{R_2 \frac{A(A-1)}{2ZN} - 1}$$

John's HV vs. LD univereal functions

High-Virtuality (HV)

$$f_{\text{univ}} = \frac{R_{\text{EMC}} - 1}{a_2 - 1}$$

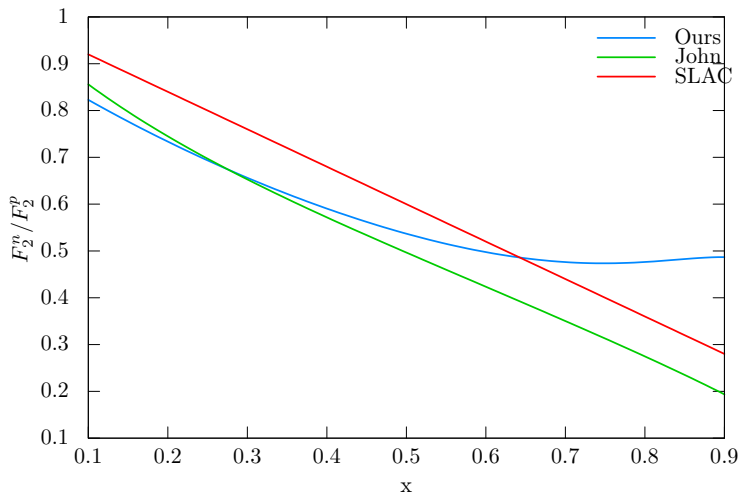
Differences between HV and LD

- $a_2 \rightarrow R_2$ (CM correction)
- $\frac{A(A-1)}{2ZN}$ scale factor
- Using iso-scalar corrected EMC ratios

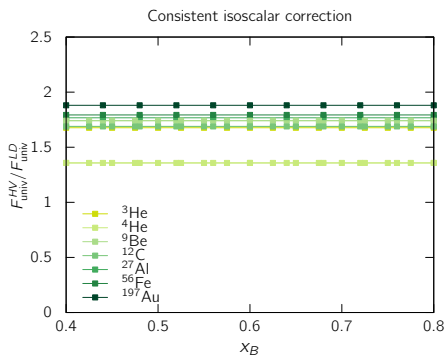
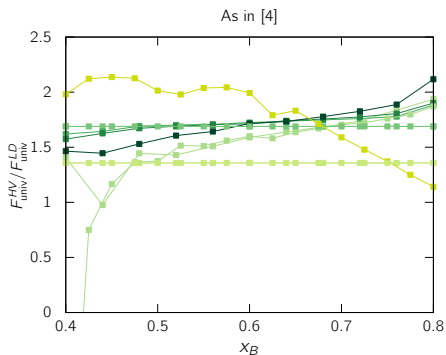
High Local Density (LD)

$$f_{\text{univ}} = \frac{R_{\text{EMC}}^{\text{iso}} - 1}{R_2 \frac{A(A-1)}{2ZN} - 1}$$

Isoscalar corrections require F_2^n
and the choice really matters.

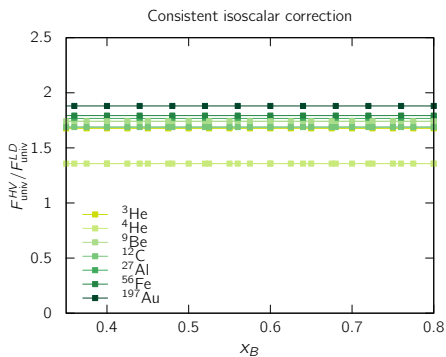
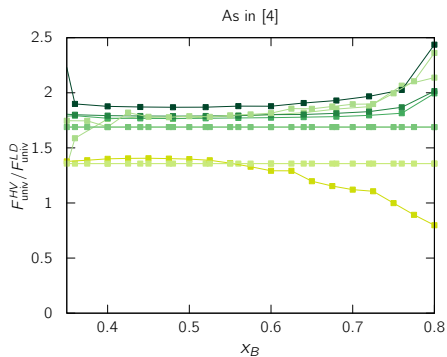


Using Isoscalar corrections from original pubs.



(I sent this around last week)

Using Isoscalar corrections via John's F_2^n



Using Isoscalar corrections via our F_2^n

