SLAC/CERN Data Interpretation in QPM

- Nachtmann inequality satisfied: $1/4 \le F_2^n / F_2^p \le 4$

- For $x \to 0 : F_2^n/F_2^p \to 1$: Sea quarks dominate with:

$$u + \bar{u} = d + \bar{d} = s + \bar{s}$$

- For $x \to 1 : F_2^n/F_2^p \to 1/4$: High momentum partons in proton (neutron) are up (down) quarks, and:

$$s + \bar{s} = 0$$

- For medium and high x, safe to assume that (with d and u denoting now quark plus antiquark distributions):

$$\frac{F_2^n}{F_2^p} = \frac{[1 + 4(d/u)]}{[4 + (d/u)]}$$

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