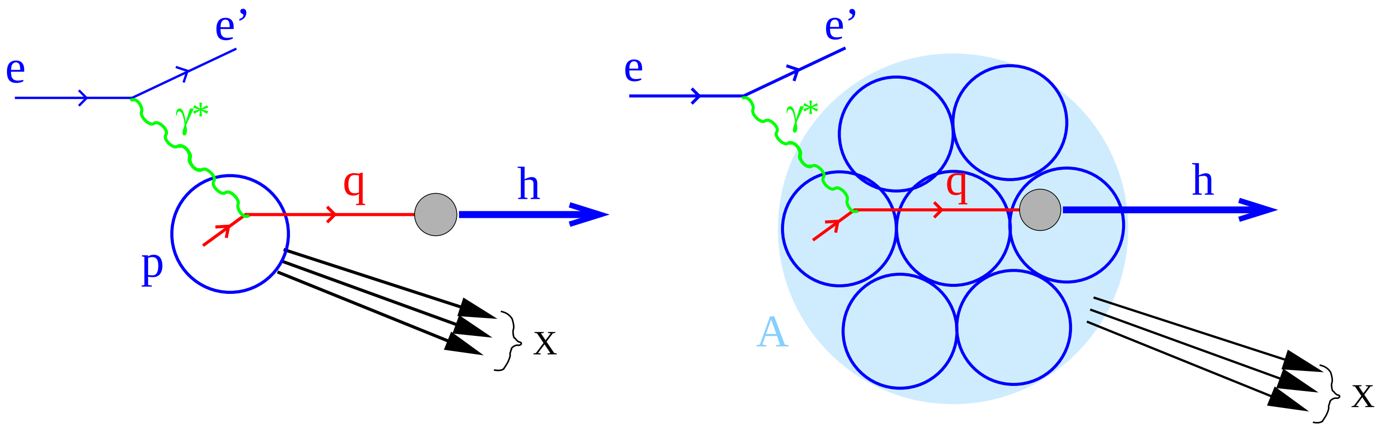
Nuclear modifications of FF's

Is the nucleus just a "sum" of protons and neutrons?



a) $e\ p \longrightarrow h\ X$ b) $e\ A \longrightarrow h\ X$

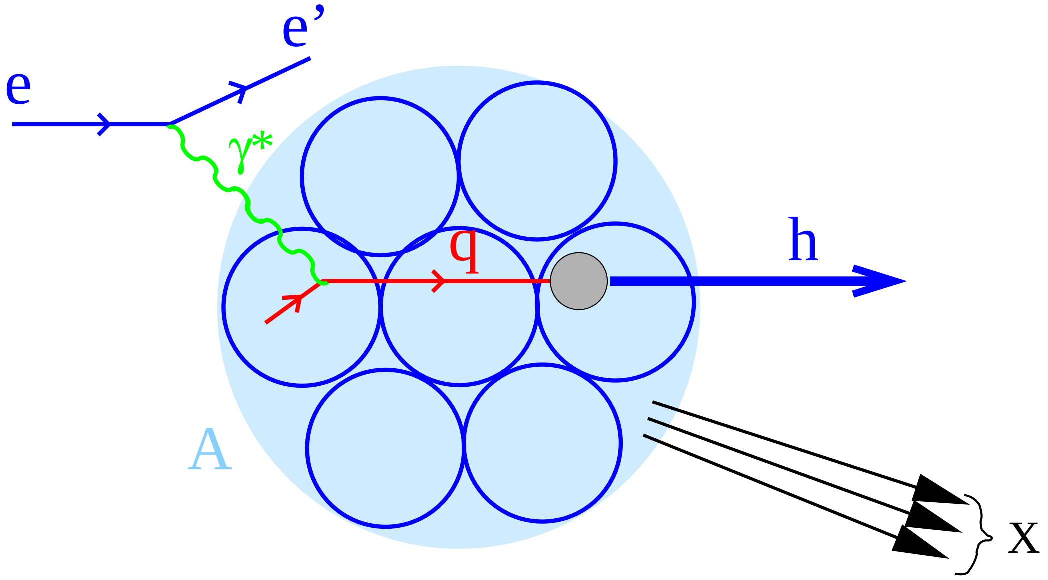
If so, in deep inelastic scattering processes the photon would only see a bigger target, and more electrons would be scattered. However

$$\frac{1}{N_A^\ell}\frac{dN_A^h}{dz} = \frac{1}{N_D^\ell}\frac{dN_D^h}{dz} \times \boxed{R_M^h(z)}$$

with $\boxed{R_M^h(z) = 1}$.

BUT experimentally: $R_M^h(z) \neq 1$!

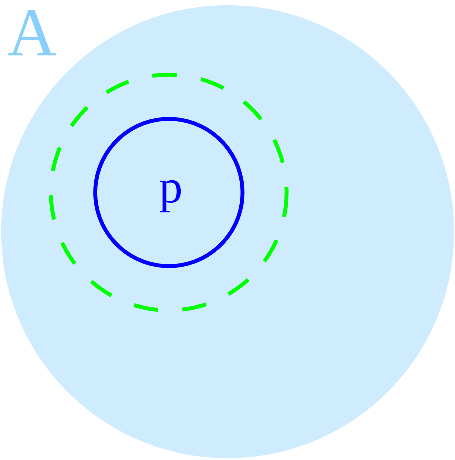
What is changing inside the nucleus?



- ⇝ virtual photon penetration in the nucleus?
- ⇝ quark composition of the nucleons? √
- ⇝ struck quark propagation?
- ⇝ hadron creation process? √
- ⇝ hadron propagation (nuclear absorption)? √

"Rescaling" model

Partial deconfinement:
"quarks are free to move
over larger distances
than in protons"



Comparison with HERMES data

$$\frac{1}{N_A^\ell}\frac{dN_A^h}{dz} = \frac{1}{N_D^\ell}\frac{dN_D^h}{dz} \times \boxed{R_M^h(z)}$$