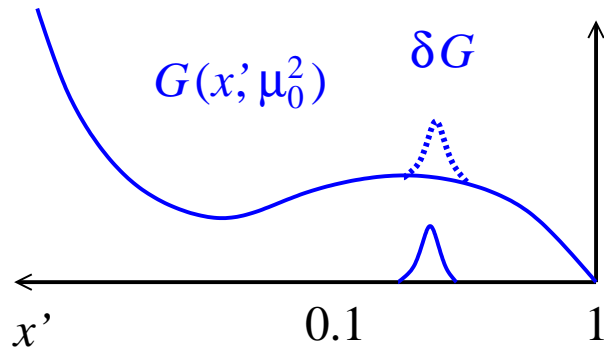
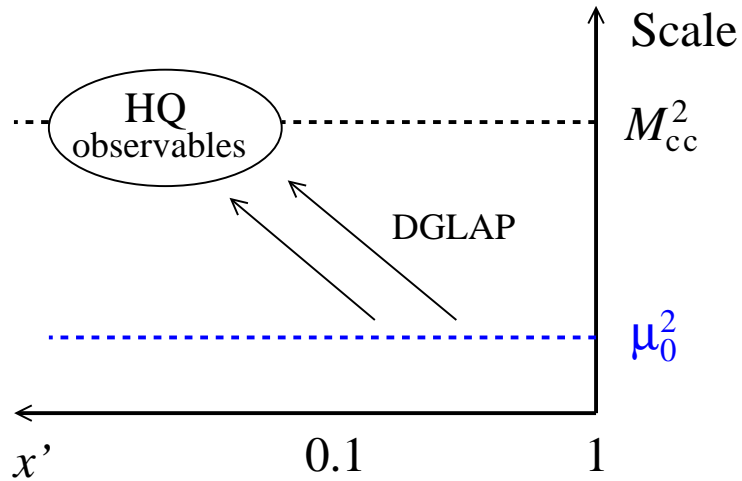


# Sensitivity of HQ observables to gluon PDF



- Connection PDF  $\leftrightarrow$  HQ observables

Gluon PDF input at fixed scale  $\mu_0^2$

Observables probe PDF at scale  
 $\sim 4m_c^2 + Q^2$  electroproduction

$\sim 4m_c^2 + 4p_T^2$  photo-production

DGLAP flow in scale and  $x'$

- Study sensitivity to gluon PDF

Modify  $G(x', \mu_0^2)$  by  $\delta G(x')$

Calculate change of observables

- Questions

Natural choice of  $\mu_0^2$  ?

How to generate modified PDFs?

Produce modified sets, cf. global fits?