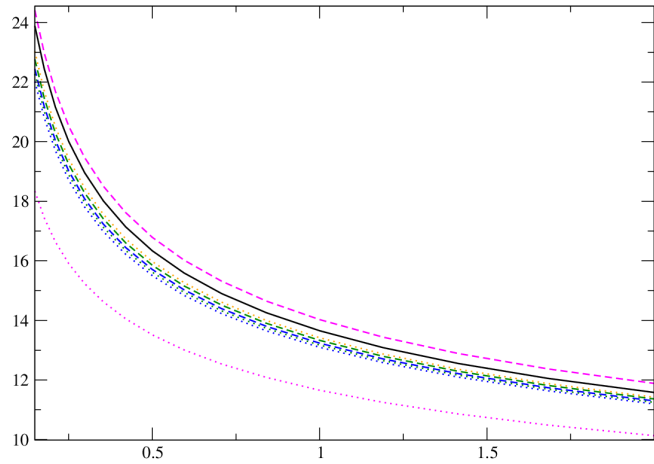


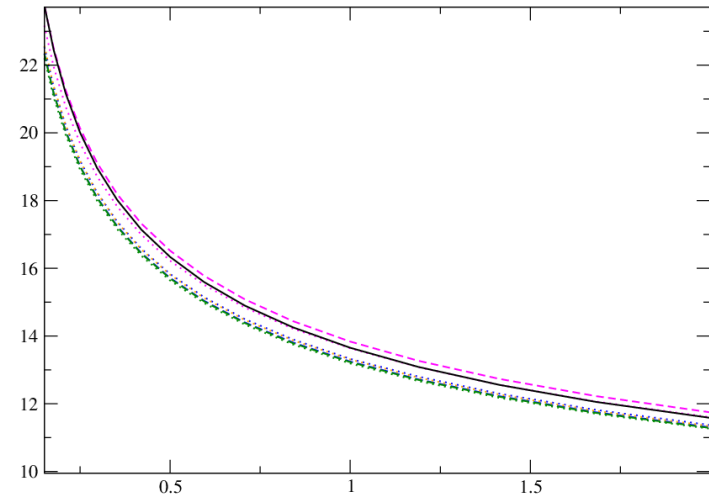
# Plots

# Convergence of soft expansion at NLO

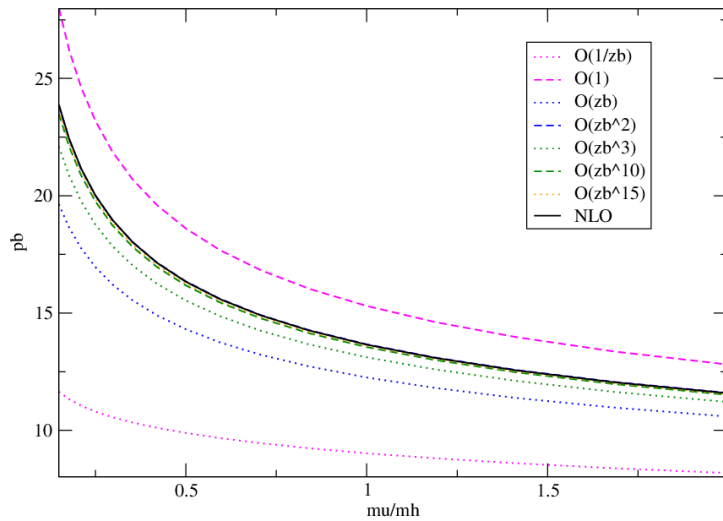
Soft Expansion NLO  $g(z)=1$



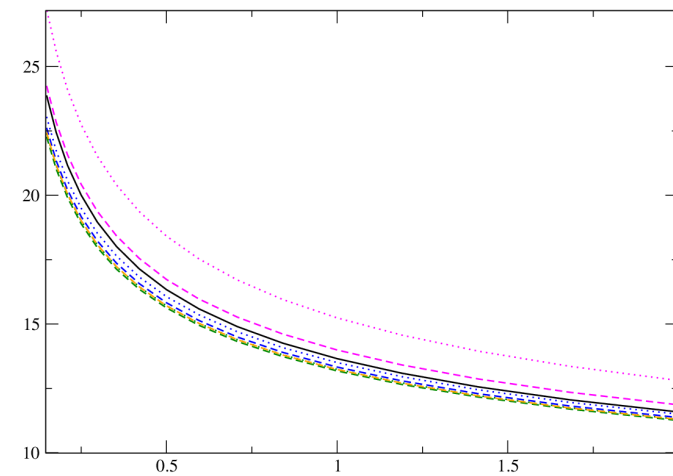
Soft Expansion NLO  $g(z)=z$



Soft Expansion NLO  $g(z)=1/z$

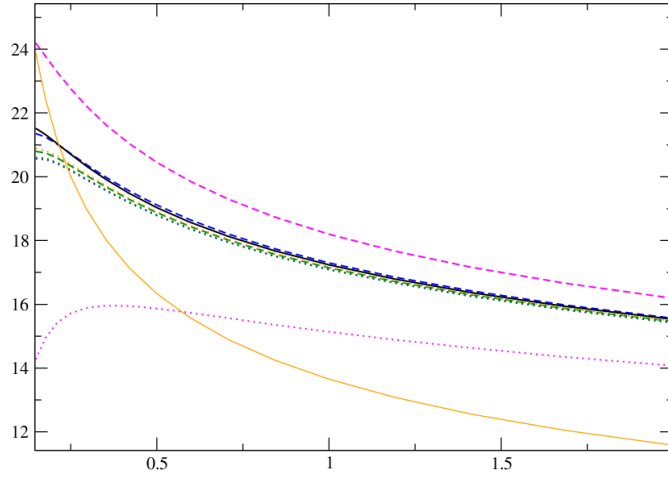


Soft Expansion NLO  $g(z)=z^2$

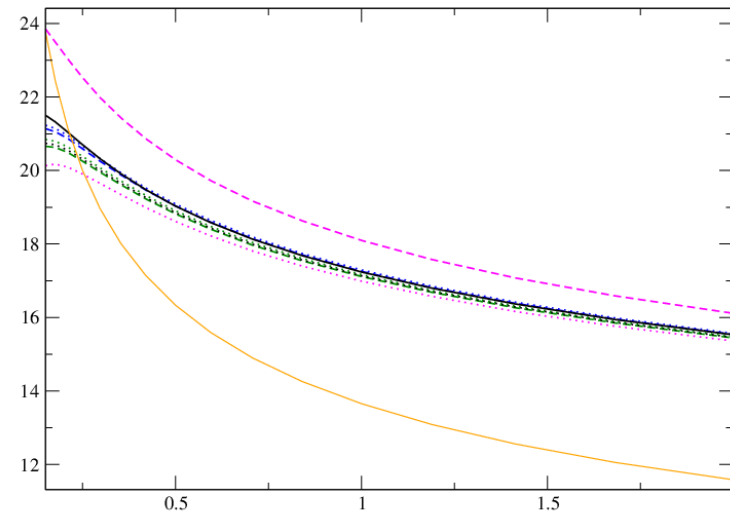


# Convergence of Soft Expansion at NNLO

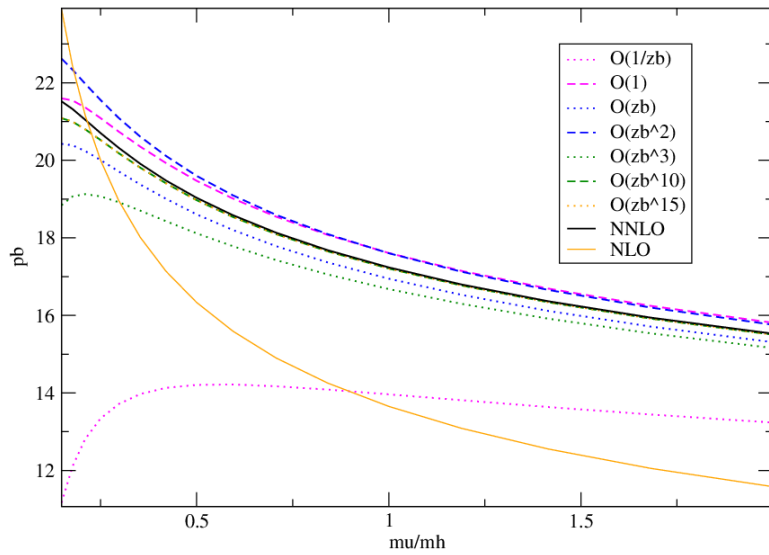
Soft Expansion NNLO  $g(z)=1$



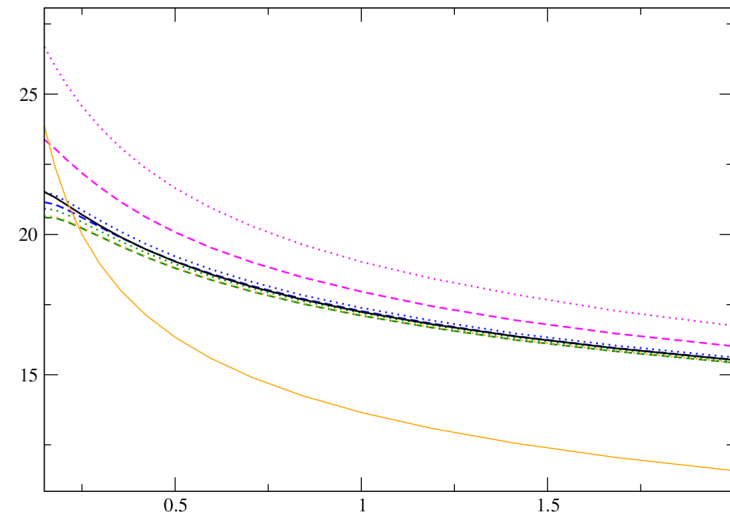
Soft Expansion NNLO  $g(z)=z$



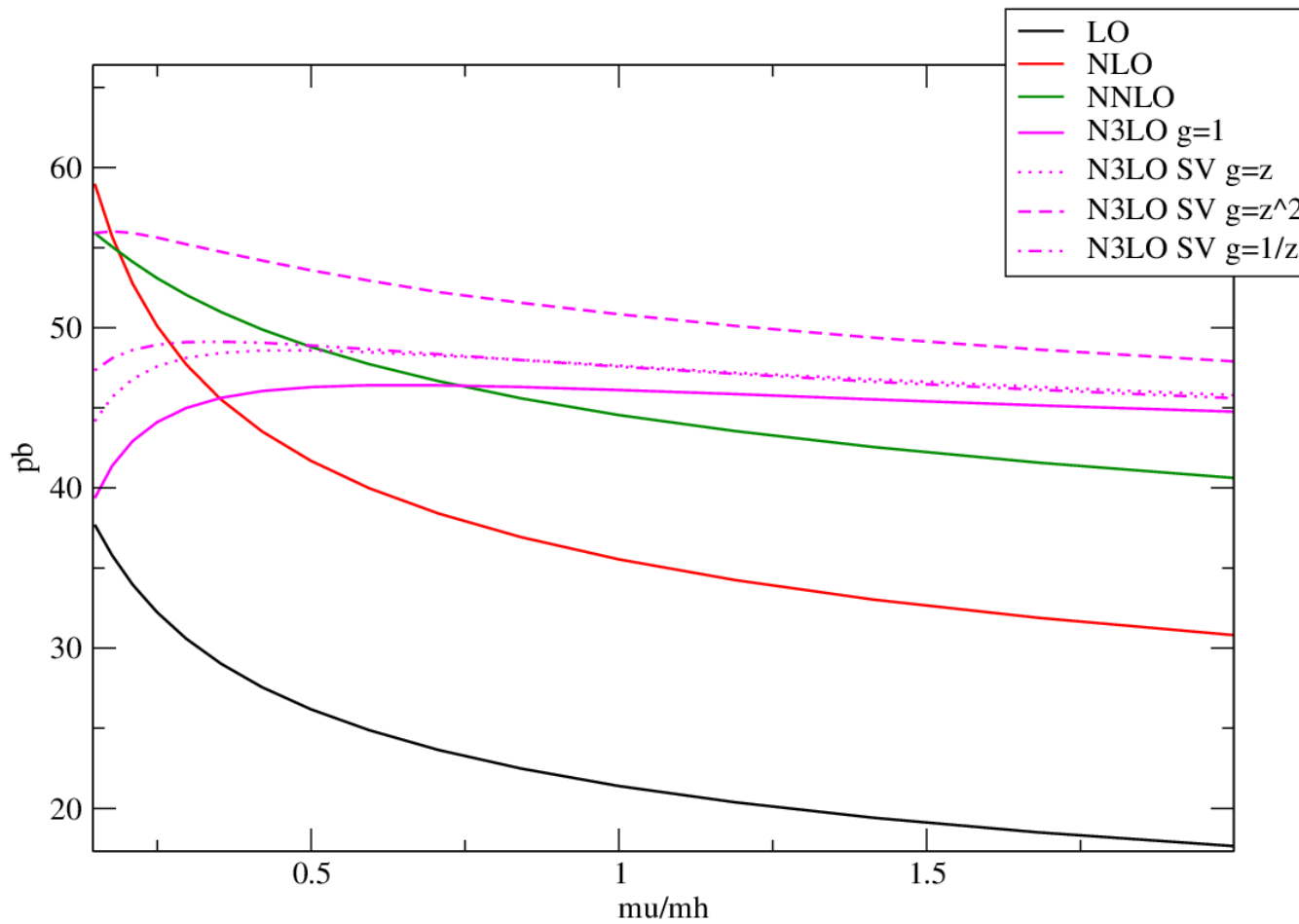
NNLO Soft Expansion  $g(z)=1/z$



NNLO  $g(z)=z^2$

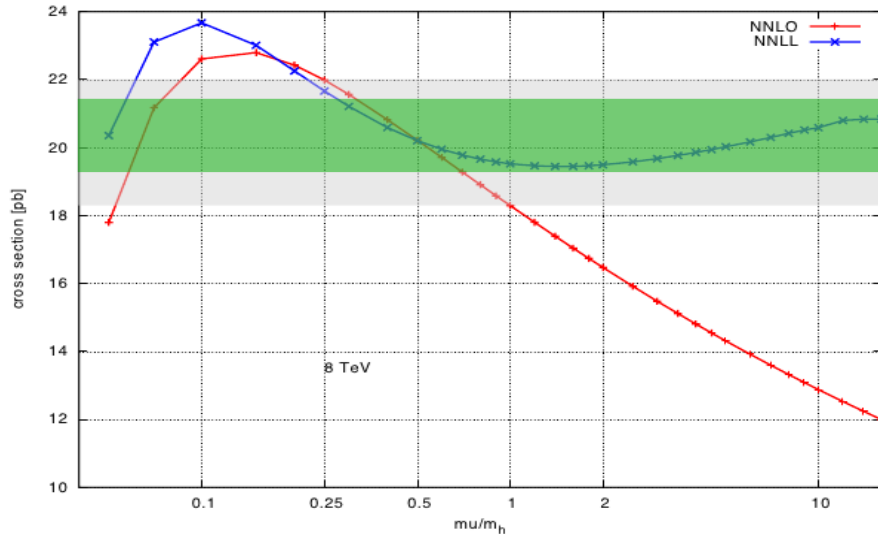


# N3LO Soft Virtual approximation

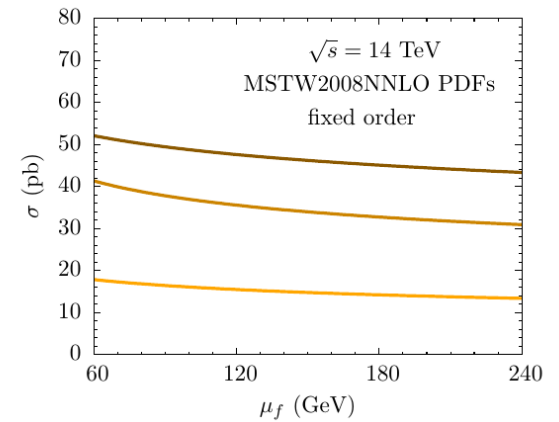
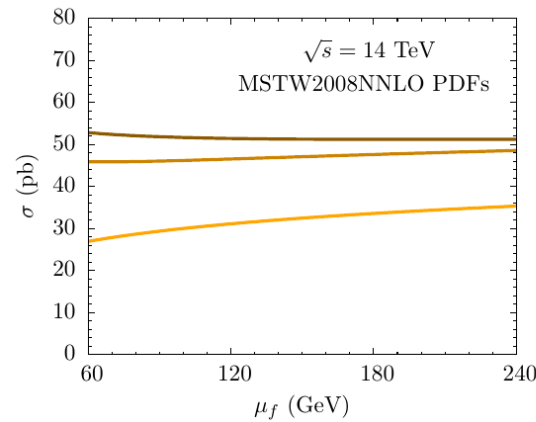
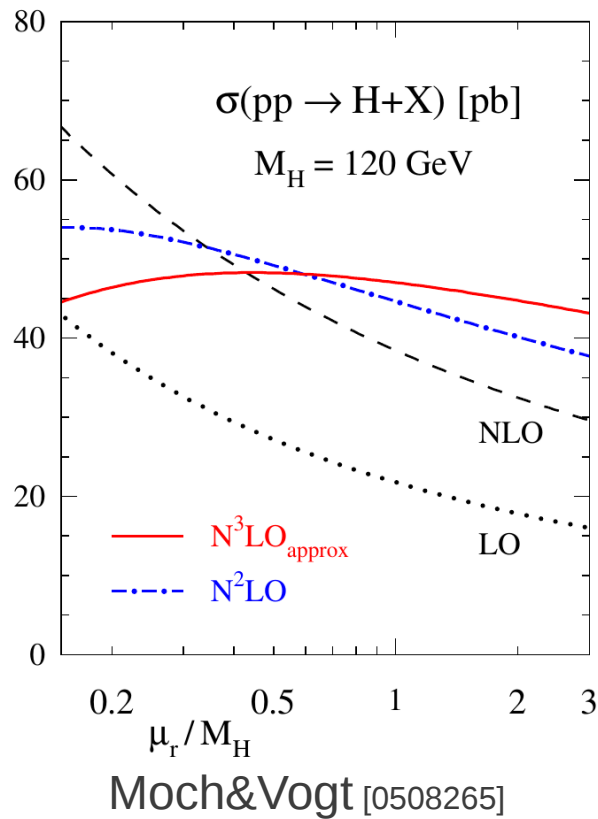
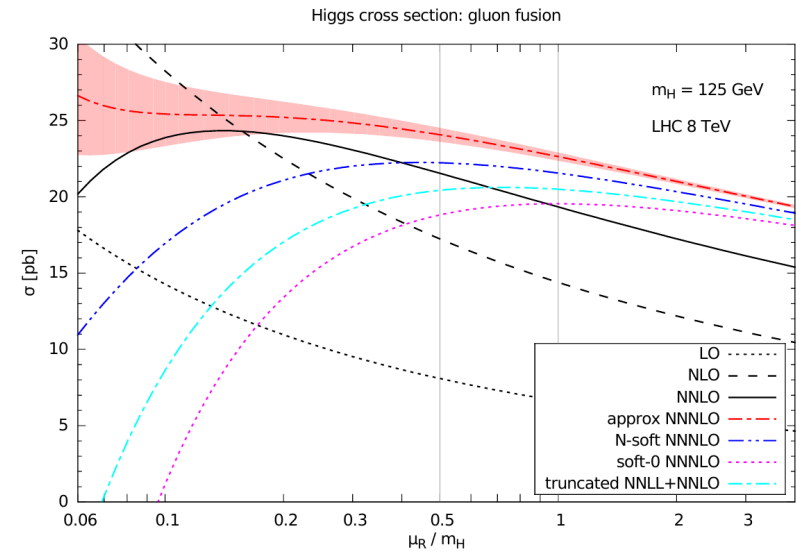


# Treshhold resummation

[Grazzini's Online calculator]



# Approximate N3LO [1404.3204]



Treshhold with SCET and  $\pi^2$   
 – resummation [0809.4283]