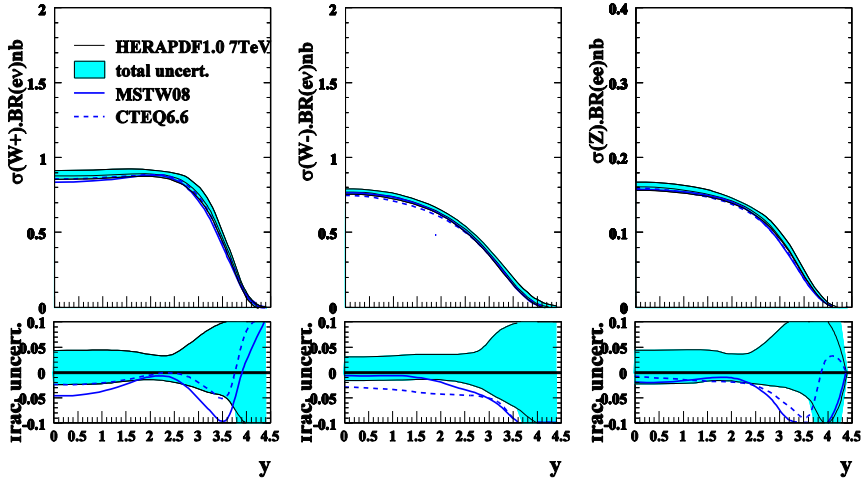
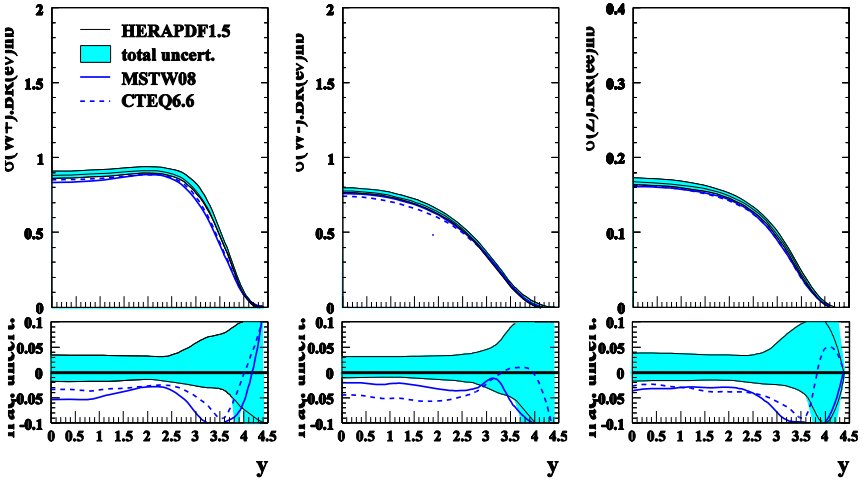
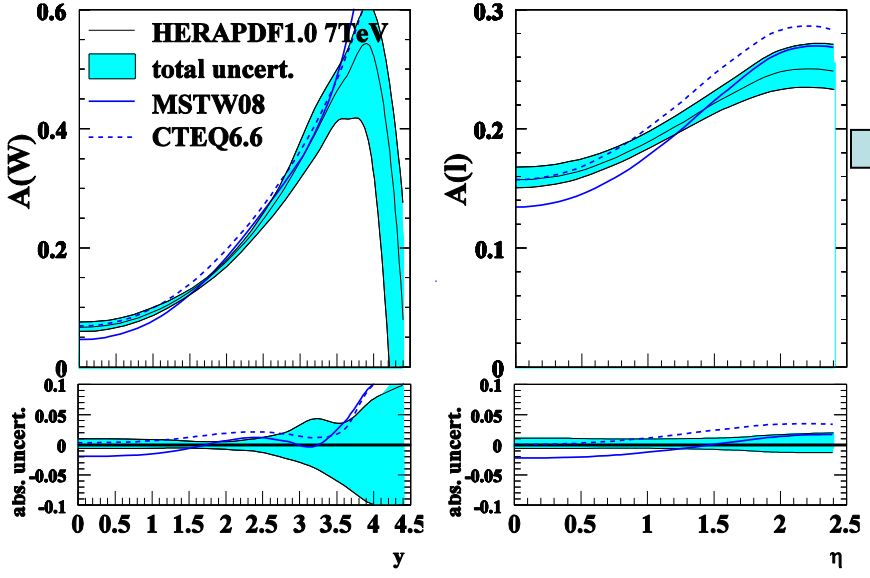
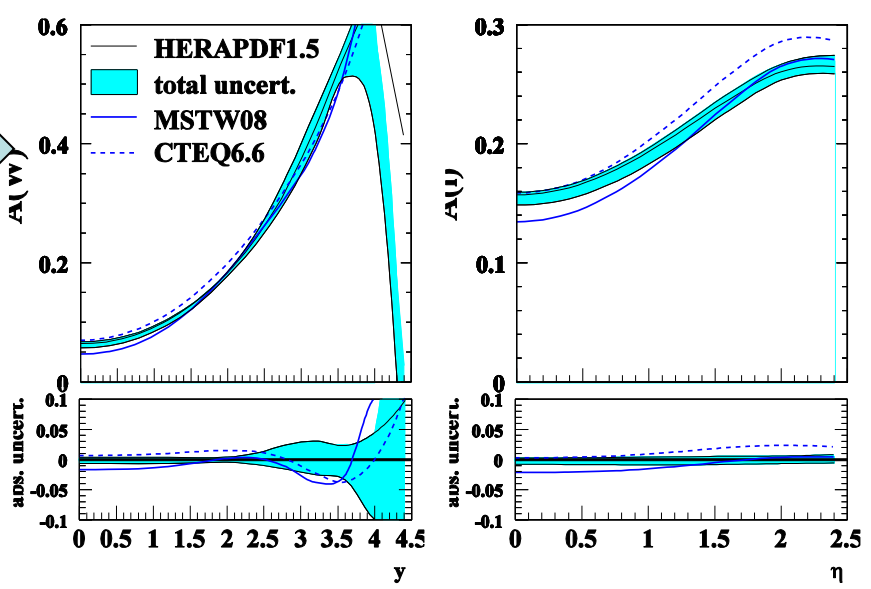
# HERAPDF1.5
# LHC and Tevatron predictions



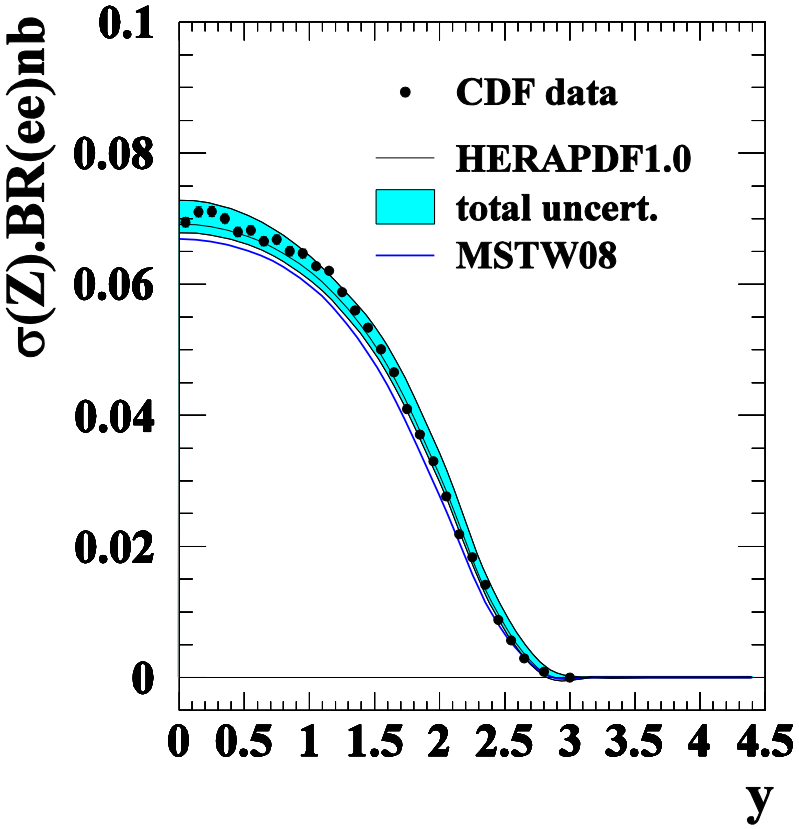



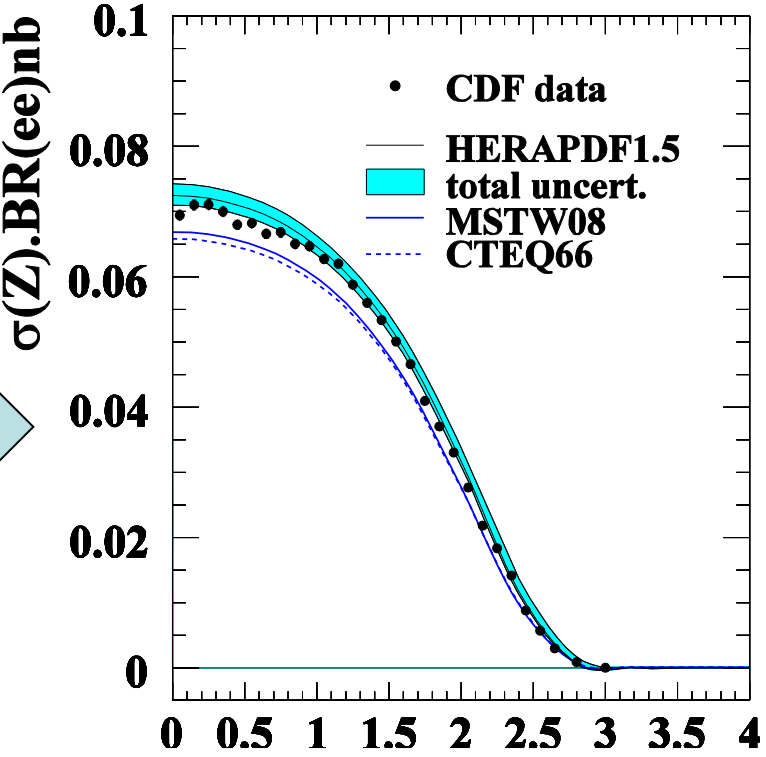

LHC 7 TeV

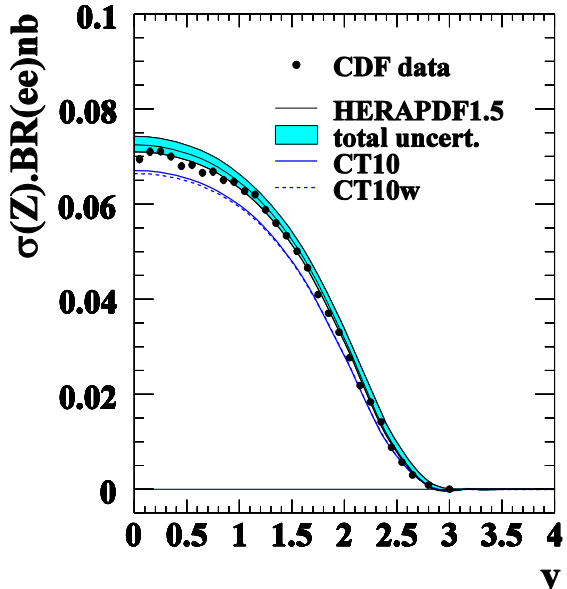



The reduced high-x error on HERAPDF1.5 PDFS results in a reduced error at high rapidity for W/Z production at the LHC



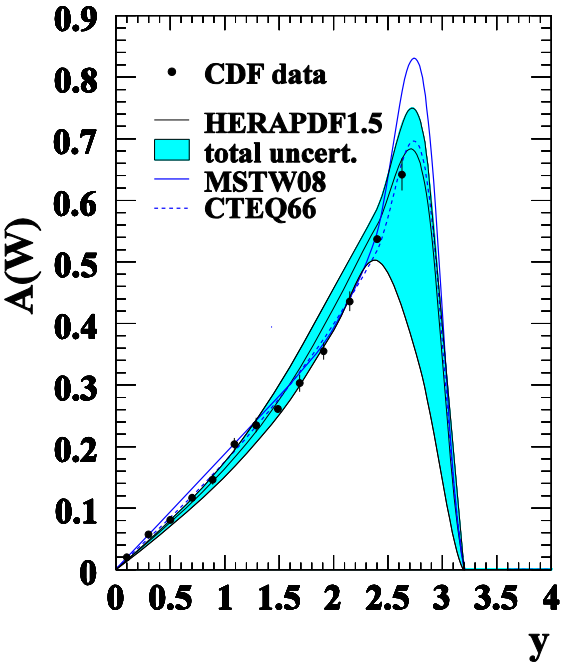



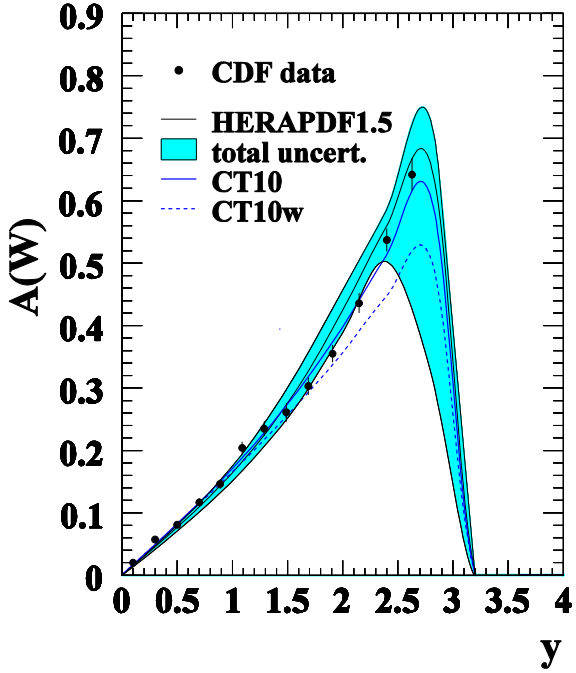




Tevatron

Nice description of CDF Z0 rapidity spectrum–

Remember there is a 7% normalisatio error on these data



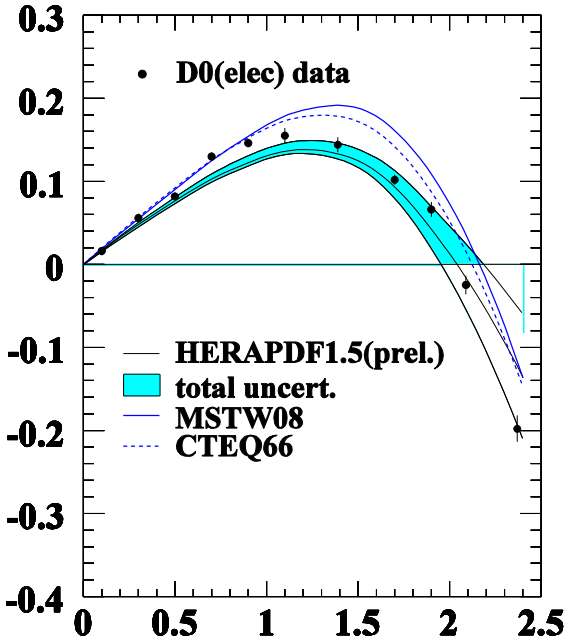

Tevatron

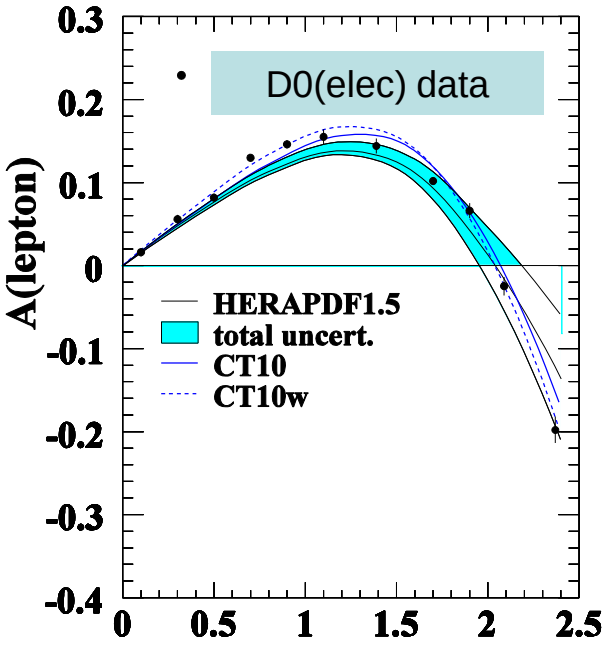
HERAPDF1.5 also describes the Tevatron asymmetry data both

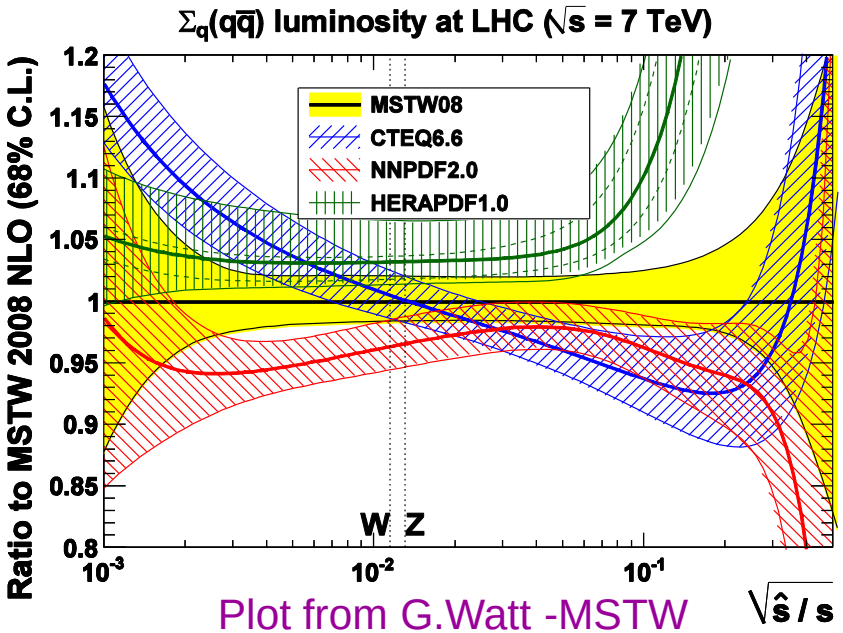
W and lepton asymetry (pt > 25 GeV)

HERAPDF uses only proton data- no need for deuteron corrections

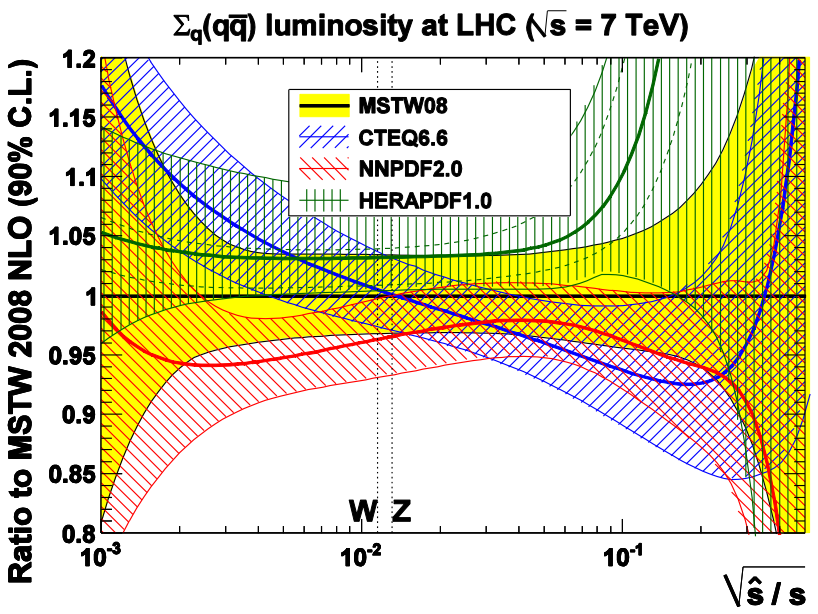
It is more comparable to CT!0 (w) than MSTW or CTEQ6.6



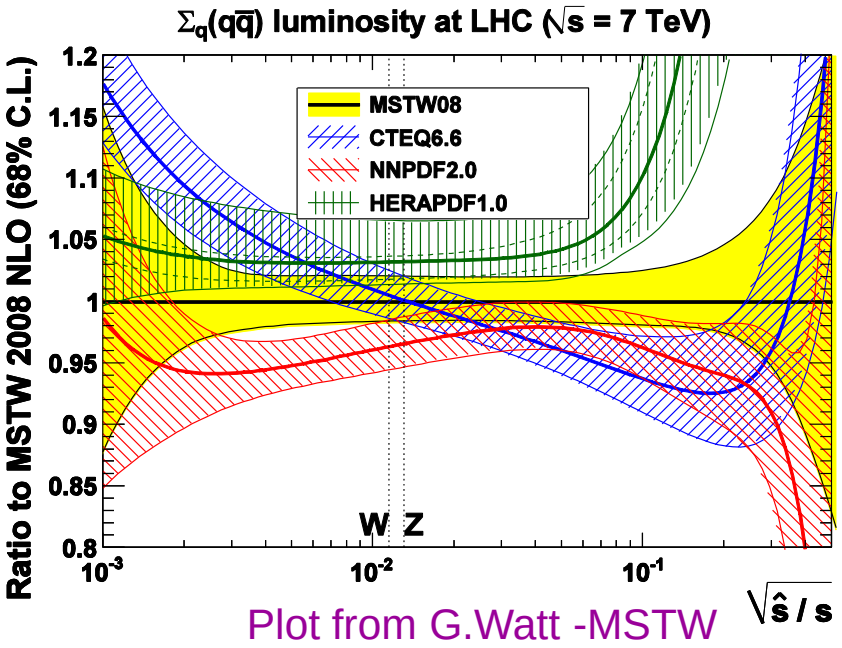






Plot from G.Watt -MSTW



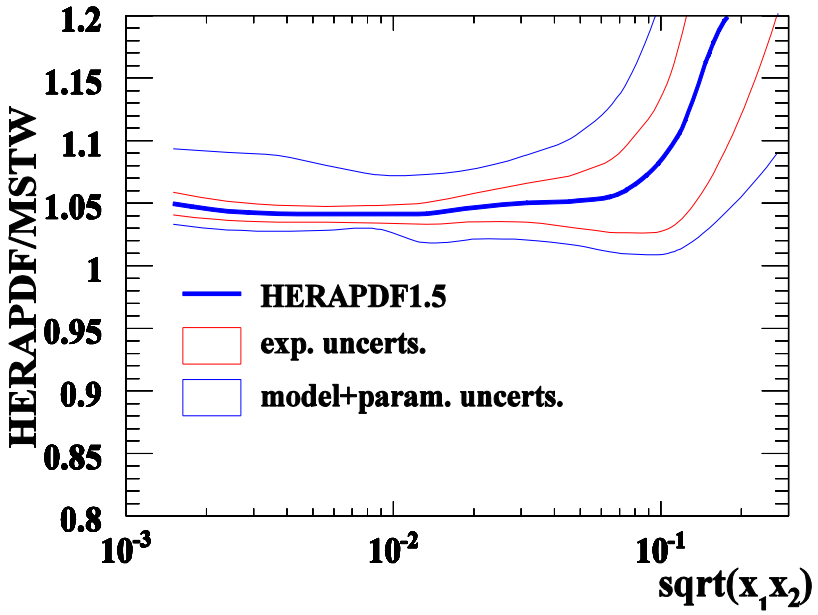

HERAPDF1.0 has a rather high q-qbar luminosity at high scale. But this does not look so dramatic if we look at 90%CL

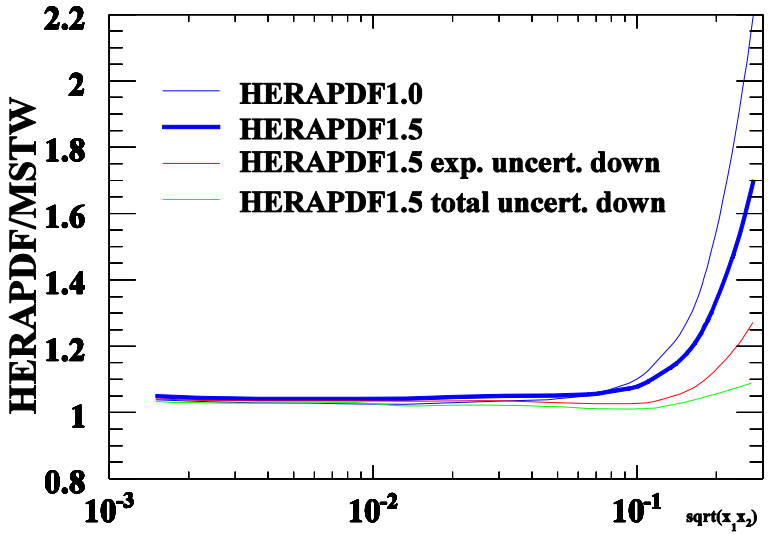



Plot from G.Watt -MSTW

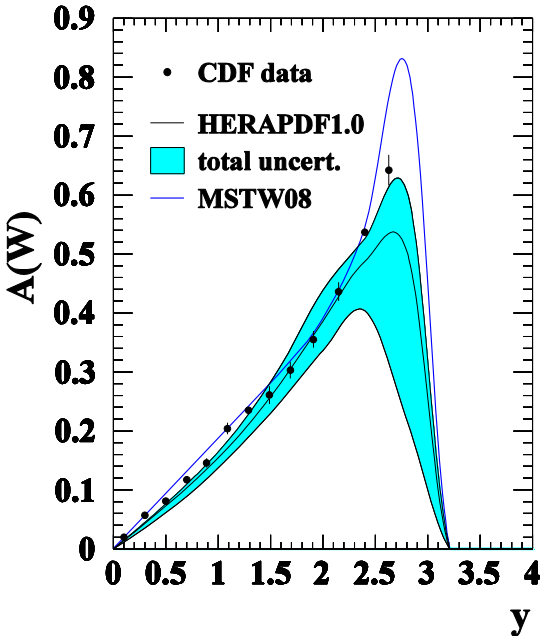
The high-scale q-qbar luminosity is reduced in HERAPDF1.5

It is now closer to MSTW



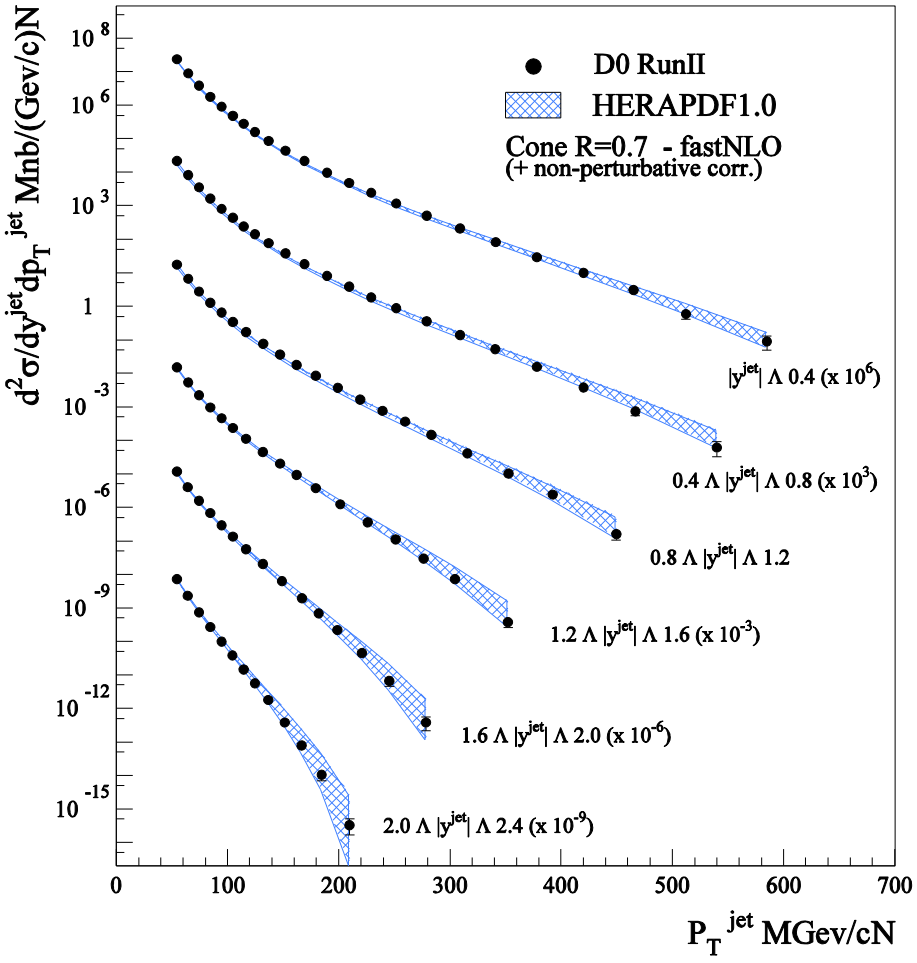



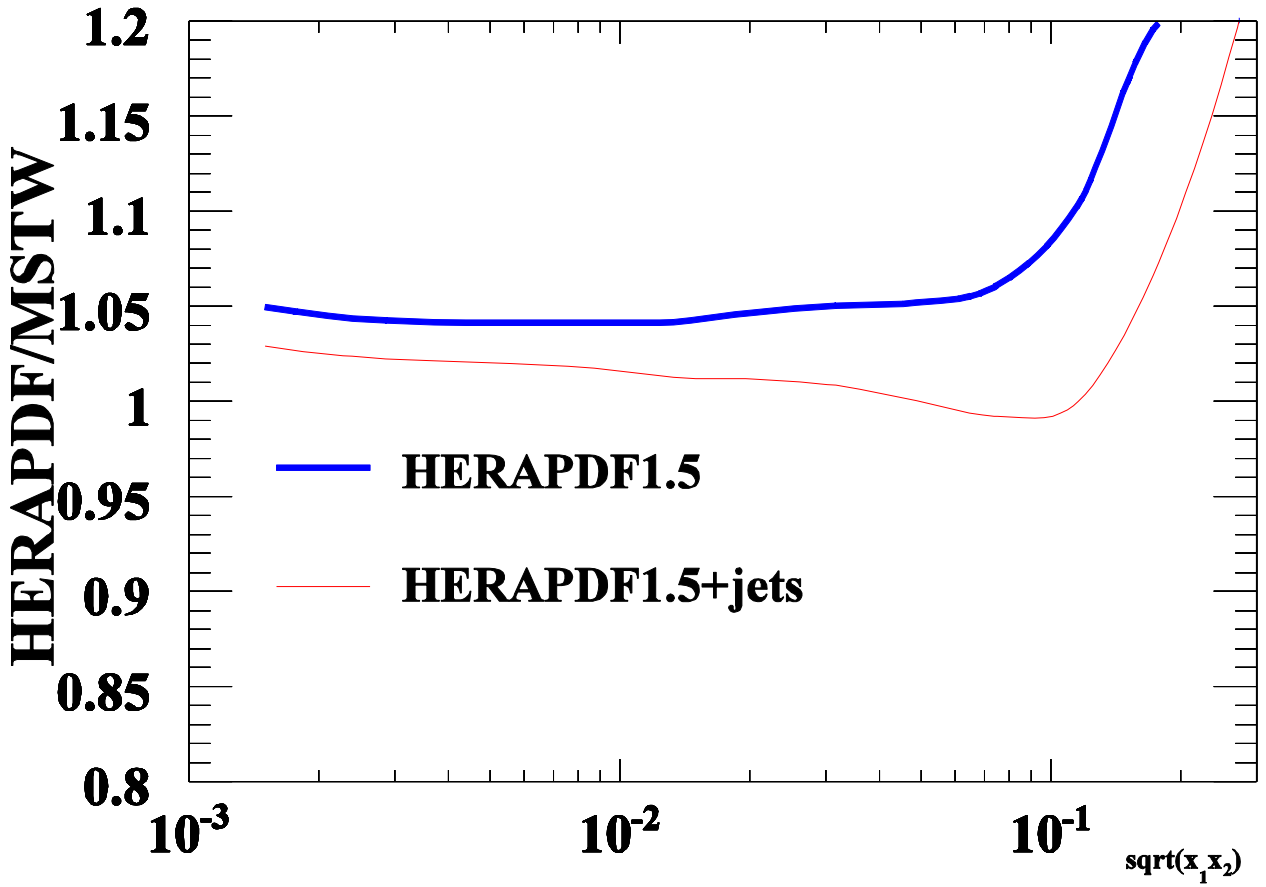
# extras




Back up HERAPDF1.0

# Tevatron Jet Cross Sections




HERAPDF/MSTW
1.2
1.15
1.1
1.05
1
0.95
0.9
0.85
0.8
$10^{-3}$
$10^{-2}$
$10^{-1}$
sqrt($x_1 x_2$)
HERAPDF1.5
HERAPDF1.5+jets