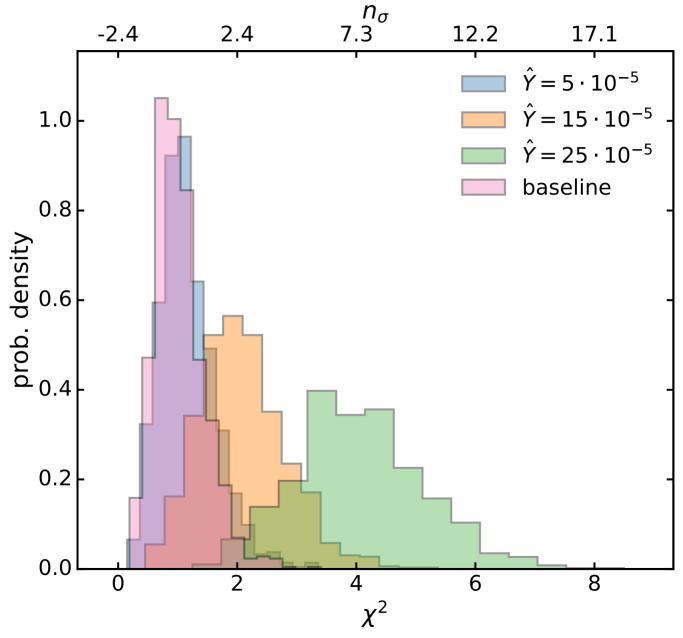
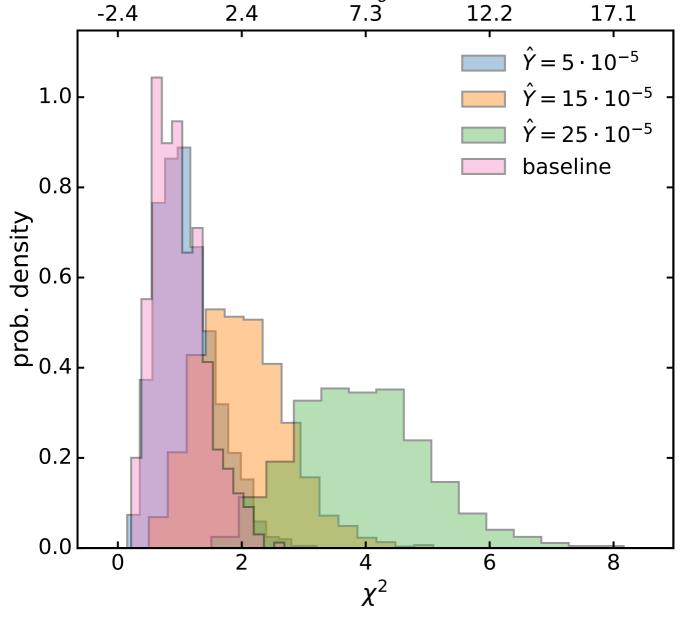
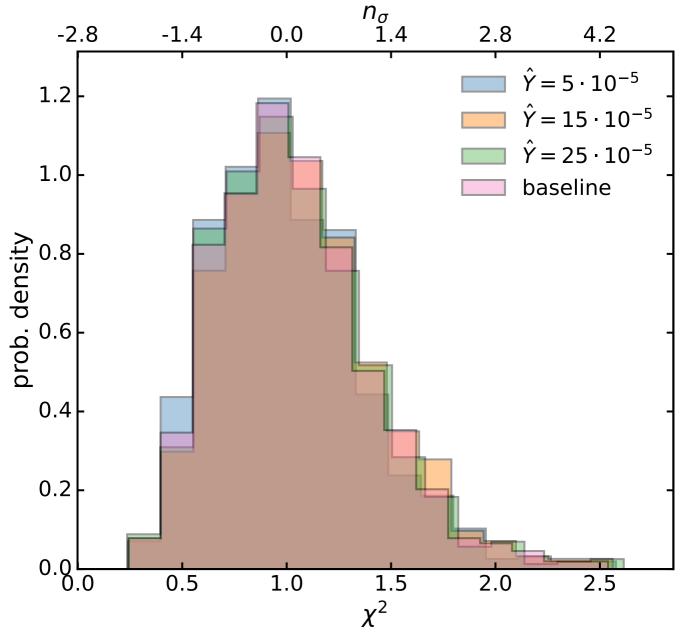
HL-LHC HM DY 14 TeV - neutral current - e ch.



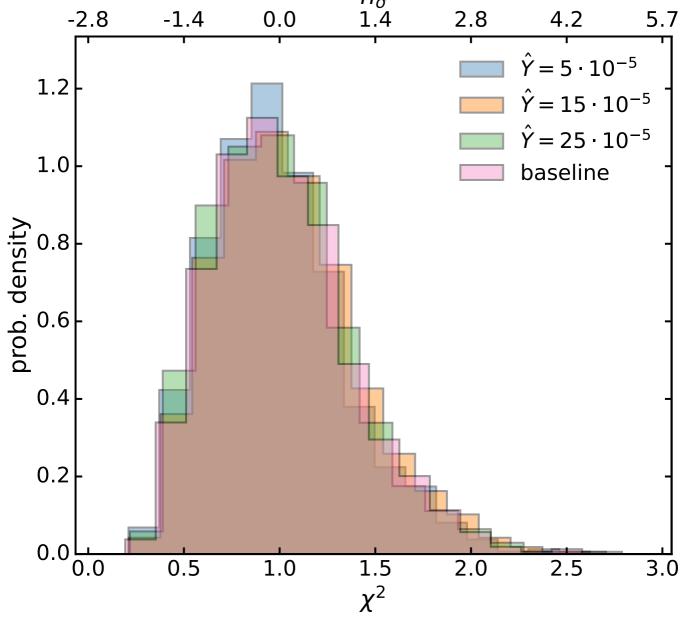
HL-LHC HM DY 14 TeV - neutral current -  $\mu$  ch.  $n_{\sigma}$  -2.4 2.4 7.3 12.2 17.1



HL-LHC HM DY 14 TeV - charged current - e ch.



HL-LHC HM DY 14 TeV - charged current -  $\mu$  ch.  $n_\sigma$ 



CMS  $t\bar{t}$  double differential  $(m_{t\bar{t}}, y_{t\bar{t}})$  $n_{\sigma}$ 0.0 1.4 -2.8 -1.4 2.8 4.2  $\hat{Y} = 5 \cdot 10^{-5}$ 1.2  $\hat{Y} = 15 \cdot 10^{-5}$  $\hat{Y} = 25 \cdot 10^{-5}$ 1.0 baseline prob. density 0 0 0 0.4 0.2 0.0 0.5 1.0 1.5 2.0 0.0

CMS  $t\bar{t}$  rapidity  $y_{t\bar{t}}$  $n_{\sigma}$ 0.0 3.2 -2.1 -1.1 2.1 4.2 5.3 1.1 1.0  $\hat{Y} = 5 \cdot 10^{-5}$  $\hat{Y} = 15 \cdot 10^{-5}$  $\hat{Y} = 25 \cdot 10^{-5}$ 8.0 baseline prob. density
o 0.2 0.0 0.0 0.5 1.0 1.5 2.0 3.0 2.5 3.5

HERA I+II inclusive NC  $e^-p$  $n_{\sigma}$ 1.8 -0.9 0.9 3.6 -2.7 -1.8 2.7  $\hat{Y} = 5 \cdot 10^{-5}$ 4.0  $\hat{Y} = 15 \cdot 10^{-5}$  $\hat{Y} = 25 \cdot 10^{-5}$ 3.5 baseline 3.0 1.5 1.0 0.5 0.0 0.7 8.0 0.9 1.0 1.1  $\frac{-}{1.4}$ 1.2

## LHCb W, Z→µ 8 TeV $n_{\sigma}$ 1.9 -1.9 0.0 3.9 5.8 1.6 $\hat{Y} = 5 \cdot 10^{-5}$ $\hat{Y} = 15 \cdot 10^{-5}$ 1.4 $\hat{Y} = 25 \cdot 10^{-5}$ baseline 1.2 prob. density o o o o o o o o o 0.4 0.2 0.0 0.5 1.0 1.5 2.5 2.0

LHCb *Z→ee*  $n_{\sigma}$ 2.7 4.1 -1.4 0.0 1.4 5.5 6.8 -2.7  $\hat{Y} = 5 \cdot 10^{-5}$ 1.2  $\hat{Y} = 15 \cdot 10^{-5}$  $\hat{Y} = 25 \cdot 10^{-5}$ 1.0 baseline prob. density 0.4 0.2 0.0 0.0 0.5 2.5 3.0 3.5 1.0 1.5 2.0

