

**H** → γγ

$|\eta^{j_i}| < 4.7$

$p_T^{j_i} > 30$  GeV


$n_{\text{jets}} \geq 2$


$\Delta\eta_{j_1, j_2} > 3.5$

$m_{jj} > 200$  GeV


 MADGRAPH5\_aMC@NLO, NNLOPS ggH + HX

 MADGRAPH5\_aMC@NLO ggH + HX

 POWHEG ggH + HX

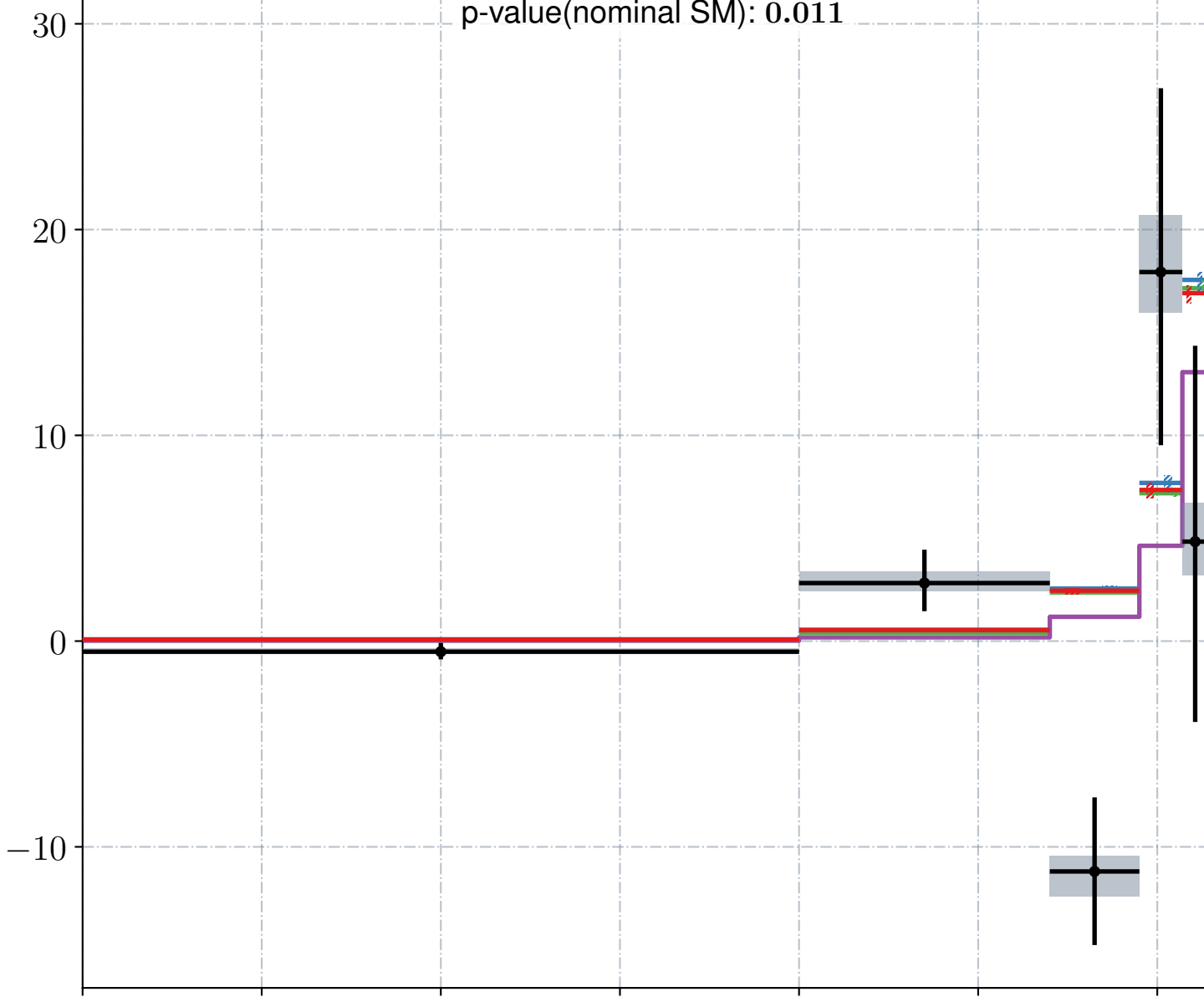
 HX = MADGRAPH5\_aMC@NLO VBF+VH+ttH

 Data, stat ⊕ syst unc.

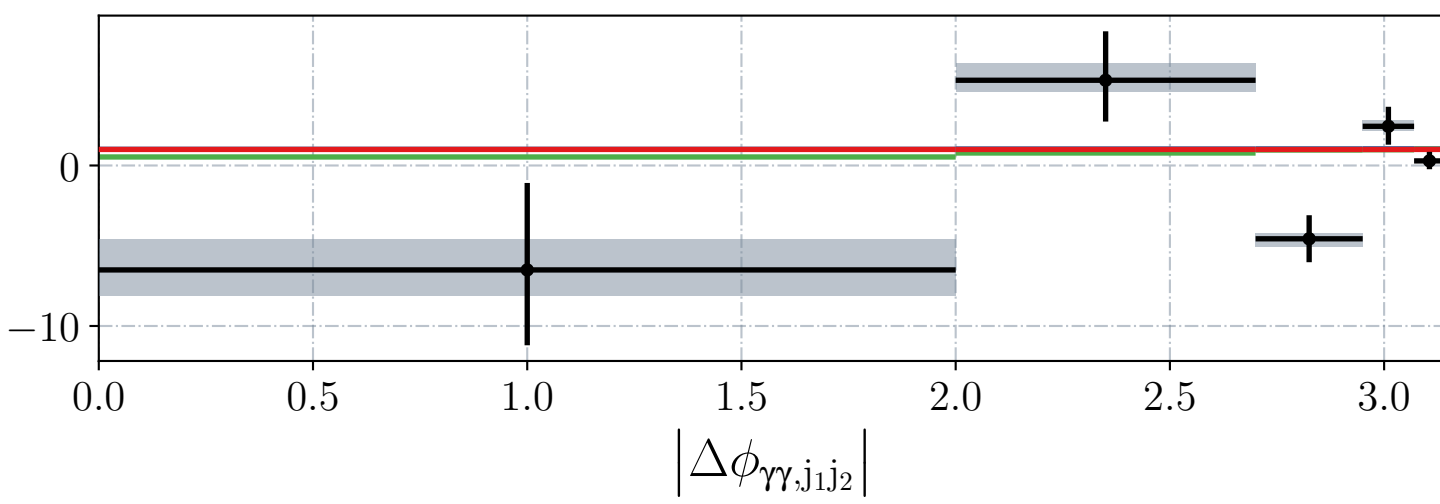
 syst unc.

p-value(nominal SM): 0.011

$\Delta\sigma_{\text{fid}} / \Delta |\Delta\phi_{\gamma\gamma, j_1 j_2}|$  (fb)



Ratio to prediction



$|\Delta\phi_{\gamma\gamma, j_1 j_2}|$