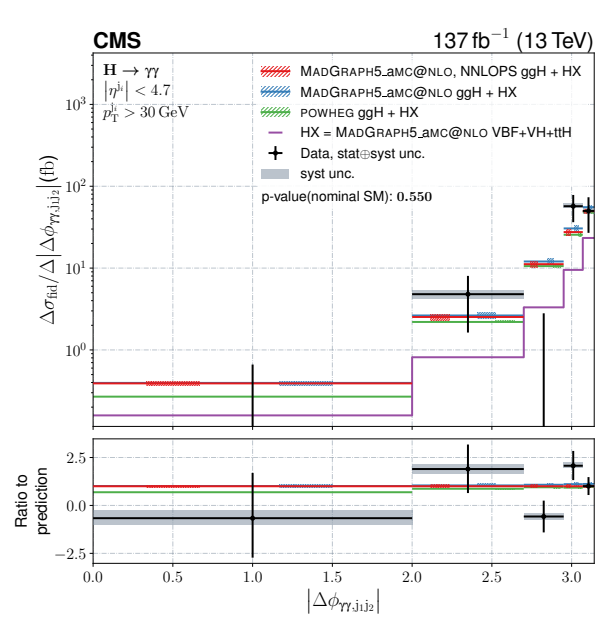
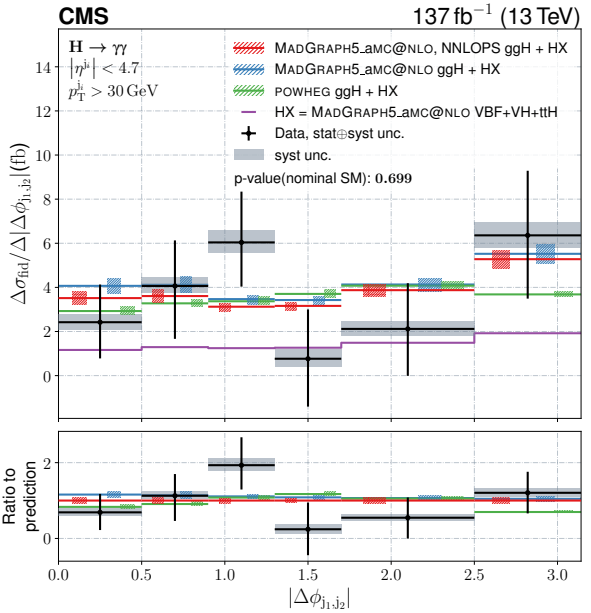
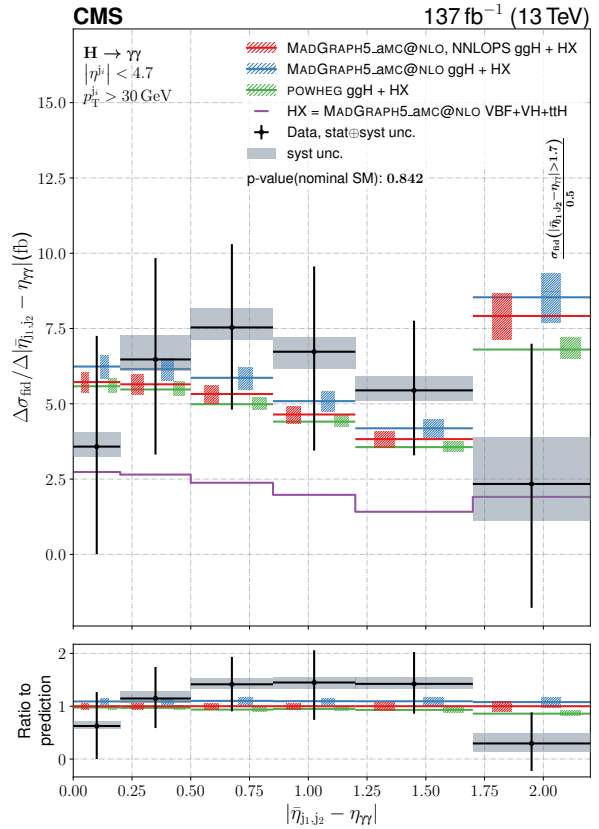
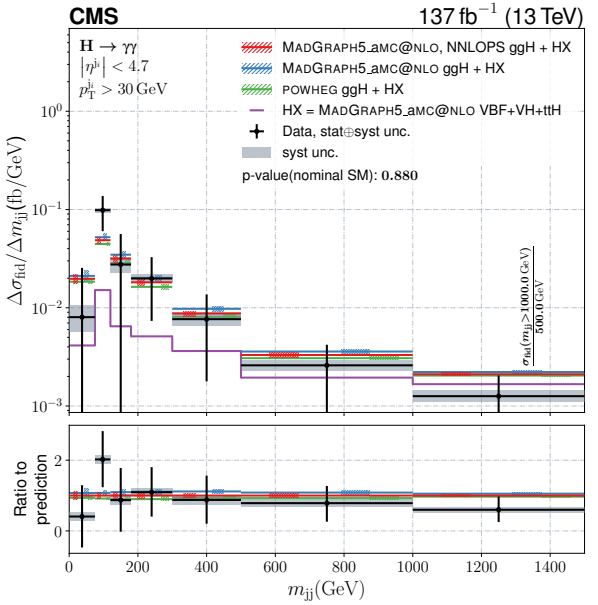

CMS
137 fb^{-1} (13 TeV)
$\mathbf{H} \to \gamma\gamma$
$|\eta^{j_i}| < 4.7$
$p_T^{j_i} > 30$ GeV
MadGraph5_aMC@NLO, NNLOPS ggH + HX
MadGraph5_aMC@NLO ggH + HX
POWHEG ggH + HX
HX = MadGraph5_aMC@NLO VBF+VH+ttH
Data, stat⊕syst unc.
syst unc.
p-value(nominal SM): 0.550
$\Delta\sigma_{fid}/\Delta|\Delta\phi_{\gamma\gamma,j_1j_2}|$ (fb)
Ratio to prediction
$|\Delta\phi_{\gamma\gamma,j_1j_2}|$


CMS
137 fb^{-1} (13 TeV)
$\mathbf{H} \to \gamma\gamma$
$|\eta^{j_i}| < 4.7$
$p_T^{j_i} > 30$ 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): 0.699
$\Delta\sigma_{fid}/\Delta|\Delta\phi_{j_1,j_2}|$ (fb)
Ratio to prediction
$|\Delta\phi_{j_1,j_2}|$


CMS
137 fb^{-1} (13 TeV)
$\mathbf{H} \to \gamma\gamma$
$|\eta^{j_i}| < 4.7$
$p_T^{j_i} > 30$ 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): 0.842
$\frac{\sigma_{fid}(|\bar{\eta}_{j_1,j_2}-\eta_{\gamma\gamma}|>1.7)}{0.5}$
$\Delta\sigma_{fid}/\Delta|\bar{\eta}_{j_1,j_2}-\eta_{\gamma\gamma}|$ (fb)
Ratio to prediction
$|\bar{\eta}_{j_1,j_2}-\eta_{\gamma\gamma}|$


CMS
137 fb^{-1} (13 TeV)
$\mathbf{H} \to \gamma\gamma$
$|\eta^{j_i}| < 4.7$
$p_T^{j_i} > 30$ 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): 0.880
$\frac{\sigma_{fid}(m_{jj}>1000.0\text{ GeV})}{500.0\text{ GeV}}$
$\Delta\sigma_{fid}/\Delta m_{jj}$ (fb/GeV)
Ratio to prediction
m_{jj} (GeV)