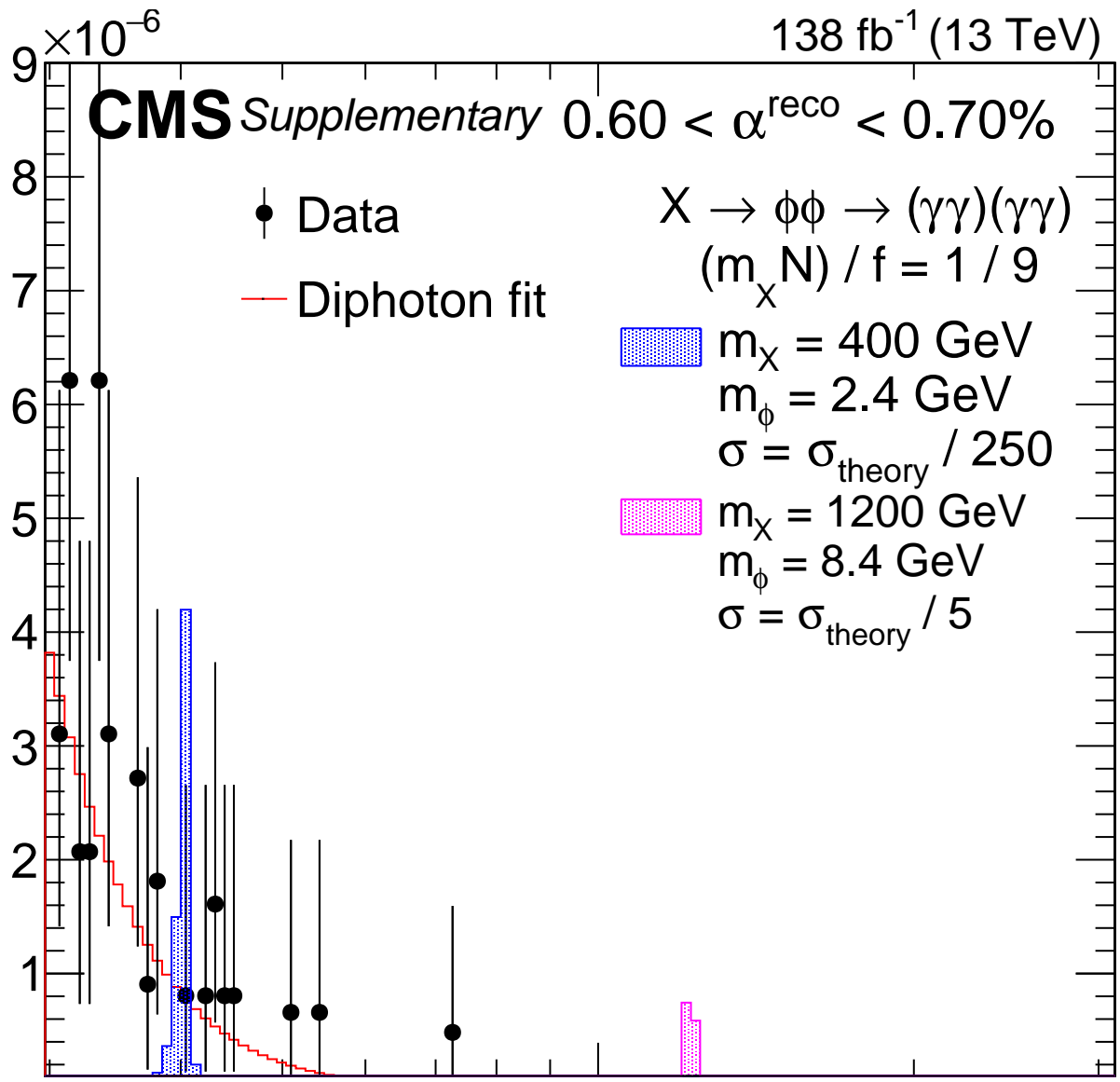


138 fb⁻¹ (13 TeV)

CMS *Supplementary* $0.60 < \alpha^{\text{reco}} < 0.70\%$

$d\sigma/dm_{\Gamma\Gamma}$ [pb/GeV]



• Data

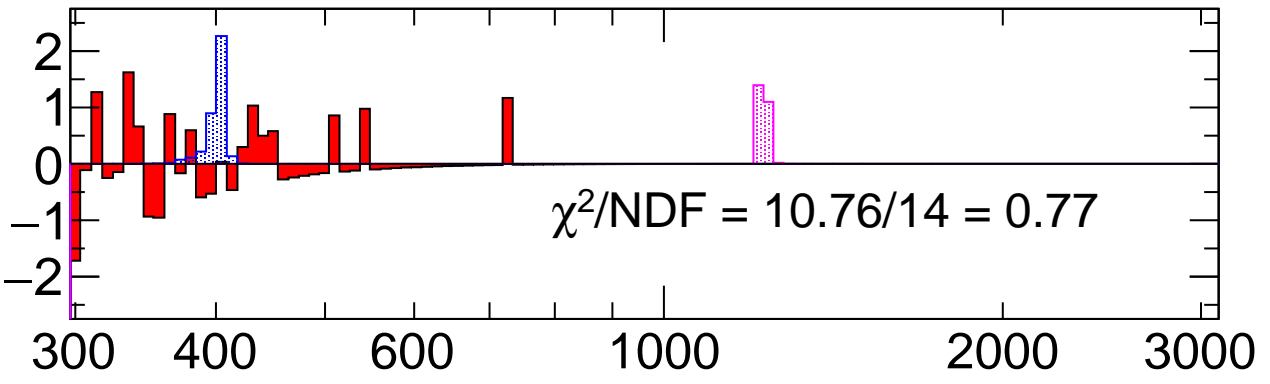
— Diphoton fit

$X \rightarrow \phi\phi \rightarrow (\gamma\gamma)(\gamma\gamma)$
 $(m_X N) / f = 1 / 9$

$m_X = 400$ GeV
 $m_\phi = 2.4$ GeV
 $\sigma = \sigma_{\text{theory}} / 250$

$m_X = 1200$ GeV
 $m_\phi = 8.4$ GeV
 $\sigma = \sigma_{\text{theory}} / 5$

$\frac{\text{(Data-Fit)}}{\text{Uncertainty}}$



$\chi^2/\text{NDF} = 10.76/14 = 0.77$

$m_{\Gamma\Gamma}$ [GeV]