

$H \rightarrow \gamma\gamma$ 

fiducial volume :

$$p_T^{\text{gen}}(\gamma_{1(2)}) > \frac{1}{3} (\frac{1}{4}) m_{\gamma\gamma} \quad \text{ECFA16 S1(+)}$$

$$|\eta^{\text{gen}}(\gamma_{1,2})| < 2.5$$

$$\text{Iso}_{R=0.3}^{\text{gen}}(\gamma_{1,2}) < 10 \text{ GeV} \quad \text{ECFA16 S2(+)}$$

 $\sigma_{\text{fid}}^{(300 \text{ fb}^{-1})}$  $\pm 0.05 \text{ (stat.)} \pm 0.09 \text{ (exp.)}$   
 $\pm 0.05 \text{ (stat.)} \pm 0.03 \text{ (exp.)}$  $\sigma_{\text{fid}}^{(3000 \text{ fb}^{-1})}$  $\pm 0.02 \text{ (stat.)} \pm 0.09 \text{ (exp.)}$   
 $\pm 0.02 \text{ (stat.)} \pm 0.03 \text{ (exp.)}$ 

Relative expected uncertainty (%)