

Signal selection efficiency (%)

CMS*Simulation* $gg \rightarrow HH \rightarrow \gamma\gamma b\bar{b}$, $c_2=0$.

—◆— Both cat.

- - * - - High-purity cat. $\kappa_t=1$.

○ Both cat.

■ High-purity cat. $\kappa_t=0.75$

□ Both cat.

▲ High-purity cat. $\kappa_t=1.25$ $M_{\gamma\gamma jj}^{\text{kin}} > 350 \text{ GeV}$ 