

$A \rightarrow Zh \rightarrow llb\bar{b}$ $L = 19.7 \text{ fb}^{-1}$ (8 TeV) $\tan\beta$ **CMS***Unpublished***95% CL limits**— **Observed**▨ **Excluded region**- - - **Expected**— **Expected $\pm 1\sigma$** — **Expected $\pm 2\sigma$**

10

1

 10^{-1} **Type-I 2HDM** $m_A = 225 \text{ GeV}$

-1

-0.5

0

0.5

1

 $\cos(\beta-\alpha)$ 