2HDM type-II, $m_{\Lambda} = m_{H} = 300 \text{ GeV}$ 95% CL Excluded: \pm 1 σ Expected **Observed Expected** ± 2σ Expected **CMS** 19.7 fb⁻¹ (8 TeV) $H \rightarrow hh \rightarrow bb\tau\tau + A \rightarrow Zh \rightarrow II\tau\tau$ 8 6 5 4 3 2 0.5 -0.5 0.0 1.0 -1.0

 $tan\beta$

 $\cos(\beta-\alpha)$