

$B(H \rightarrow SS)$ **CMS** *Supplementary* $H \rightarrow SS \rightarrow 4\ell, \ell = e, \mu$ *ee channel*

95% CL upper limits

- - - Median expected

— Observed

— $m_H = 125$ GeV, $m_S = 30$ GeV— $m_H = 125$ GeV, $m_S = 50$ GeV