

CMS *Simulation Supplementary*

(a)

 $pp \rightarrow \tilde{\chi}_i^{0,\pm} \tilde{\chi}_j^{0,\mp} \rightarrow \tilde{\chi}_1^0 \tilde{\chi}_1^0 + X_{\text{soft}} \rightarrow HH\tilde{G}\tilde{G} + X_{\text{soft}}$ $m(\tilde{\chi}_2^0) = m(\tilde{\chi}_1^\pm) = m(\tilde{\chi}_1^0), m(\tilde{G}) = 1 \text{ GeV}$ 