CMS Simulation (LHE) 14TeV TeV 0.03 $|pp| \rightarrow |h| \rightarrow |2h_1| \rightarrow |2h_D| + |2\gamma_D| \rightarrow |2h_D| + |4\mu|$ GeV $m_h = 125 \text{ GeV}, m_{n_s} = 50 \text{ GeV}, m_{n_h} = 1 \text{ GeV}$ $m_{\gamma_{\scriptscriptstyle D}}$ = 20 GeV, $c\tau_{\gamma_{\scriptscriptstyle D}}$ = 0 mm 0.025 of events / 0.02 0.015 Fraction 0.01 0.005 30 40 50 60 90