CMS Simulation (LHE) 14TeV TeV $|pp| \rightarrow |h| \rightarrow |2h_1| \rightarrow |2h_D| + |2\gamma_D| \rightarrow |2h_D| + |4\mu|$ GeV 0.03 $m_h = 125 \text{ GeV}, m_{n_s} = 50 \text{ GeV}, m_{n_h} = 1 \text{ GeV}$ $m_{\gamma_{R}} = 20 \text{ GeV}, c\tau_{\gamma_{R}} = 100 \text{ mm}$ Fraction of events / 1 0.025 0.02 0.015 0.01 0.005 30 50 40 60 90