CMS Simulation (LHE) 14TeV TeV $|pp| \rightarrow |h| \rightarrow |2h_1| \rightarrow |2h_D| + |2\gamma_D| \rightarrow |2h_D| + |4\mu|$ Events / 100.0 mg/s / 100.001 $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_s} = 1 \text{ GeV}$ $m_{\gamma_D} = 20$ GeV, $c\tau_{\gamma_D} = 1000$ mm 500 100015002000250030003500400045005000