CMS Simulation (LHE) 14TeV TeV Normalized Fraction of Events / 1.0 mm $|pp| \rightarrow |h| \rightarrow |2h_1| \rightarrow |2h_D| + |2\gamma_D| \rightarrow |2h_D| + |4\mu|$ $m_h = 125 \text{ GeV}, m_{n_s} = 50 \text{ GeV}, m_{n_s} = 1 \text{ GeV}$ $m_{\gamma_D} = 20 \text{ GeV}, c\tau_{\gamma_D} = 10 \text{ mm}$ 5 20 15 25 30 35 40