CMS Simulation (LHE) 14TeV TeV $pp \rightarrow h \rightarrow 2h_1 \rightarrow 2h_D + 2\gamma_D \rightarrow 2h_D + 4\mu'$ Normalized Fraction of Events / 1.0 mm $m_h = 125 \text{ GeV}, m_{n_s} = 50 \text{ GeV}, m_{n_s} = 1 \text{ GeV}$ $m_{\gamma_{\Sigma}} = 20 \text{ GeV}, c\tau_{\gamma_{\Sigma}} = 10 \text{ mm}$ 10 (1 - e^{-50.0/10}) 15 20 25 30 35 40