CMS Simulation (LHE) 13 TeV $pp \rightarrow h \rightarrow 2h_1 \rightarrow 2h_D + 2\gamma_D \rightarrow 2h_D + 4\mu$ 0.04 Fraction of events / 0. $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_p} = 1 \text{ GeV}$ $m_{\gamma_{S}} = 8.5 \text{ GeV}, c\tau_{\gamma_{S}} = 2 \text{ mm}$ — 1st muon (leading p_T) --- 2nd muon --- 3rd muon 0.03 - · - 4th muon 0.02 0.01 3