CMS Simulation (LHE) 14 TeV $pp \rightarrow h \rightarrow 2h_1 \rightarrow 2h_D + 2\gamma_D \rightarrow 2h_D + 4\mu$ Fraction of events / 0.1 $m_h = 125 \text{ GeV}, m_{n_s} = 50 \text{ GeV}, m_{n_p} = 1 \text{ GeV}$ $m_{\gamma_2} = 20 \text{ GeV}, c\tau_{\gamma_2} = 10 \text{ mm}$ —1st μμ (leading p_T) 2nd μμ 0.01 0.005