CMS Simulation (LHE) 13 TeV $pp \rightarrow h \rightarrow 2h_1 \rightarrow 2h_D + 2\gamma_D \rightarrow 2h_D + 4\mu$ $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_p} = 1 \text{ GeV}$ $m_{\gamma_2} = 1 \text{ GeV}, c\tau_{\gamma_2} = 100 \text{ mm}$ —1st n_D (leading p_T) 2nd n_D 20 40 60 80 100 120 p of n [GeV]

Exaction of events / 1 GeV 0.04 0.035 0.02 0.015 0.01

0.005