CMS Simulation (LHE) 13 TeV >0.045 O 0.04 $pp \rightarrow h \rightarrow 2h_1 \rightarrow 2h_D + 2\gamma_D \rightarrow 2h_D + 4\mu$ $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_p} = 1 \text{ GeV}$ $m_{\gamma_2} = 0.4 \text{ GeV}, c\tau_{\gamma_2} = 20 \text{ mm}$ Fraction of events / 1 0.035 0.03 0.025 0.01 0.01 —1st n_D (leading p_T) 2nd n_D 0.005 20 40 60 80 100 120 p of n [GeV]