CMS Simulation (LHE) 13 TeV $|pp| \rightarrow h \rightarrow 2h_1 \rightarrow 2h_D + 2\gamma_D \rightarrow 2h_D + 4\mu$ $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_D} = 1 \text{ GeV}$ $m_{\gamma_2} = 0.4 \text{ GeV}, c\tau_{\gamma_2} = 5. \text{ mm}$ 1st dark photon (leading p_T) 2nd dark photon 15 10 20