## CMS Simulation (LHE) 14TeV TeV $|pp| \rightarrow |h| \rightarrow |2h_1| \rightarrow |2h_D| + |2|\gamma_D| \rightarrow |2h_D| + |4|\mu|$ 0.04 0.035 0.04 $m_h = 125 \text{ GeV}, m_{n_s} = 50 \text{ GeV}, m_{n_D} = 1 \text{ GeV}$ $m_{\gamma_D} = 20 \text{ GeV}, c\tau_{\gamma_D} = 10 \text{ mm}$ 1st dark photon (leading p<sub>T</sub>) 2nd dark photon raction, 0.005 30 40 50 80 90 60