CMS Simulation (LHE) 8 TeV Fraction of events / 1 GeV $pp \rightarrow h \rightarrow 2n_1 \rightarrow 2n_D + 2~\gamma_D \rightarrow 2n_D + 4\mu$ 0.12 $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_D} = 1 \text{ GeV}$ $m_{\gamma_{D}} = 0.700 \text{ GeV}, c\tau_{\gamma_{D}} = 2. \text{ mm}$ 1st dark photon (leading p_T) 0.1 2nd dark photon 0.08 0.06 0.04 0.02 40 50 60 80 90 30