CMS Simulation (LHE) 8 TeV Fraction of events / 1 GeV $pp \rightarrow h \rightarrow 2n_1 \rightarrow 2n_D + 2~\gamma_D \rightarrow 2n_D + 4\mu$ $m_h = 125 \text{ GeV}, m_{n_1} = 10 \text{ GeV}, m_{n_2} = 1 \text{ GeV}$ 0.12 $m_{\gamma_D} = 0.550 \text{ GeV}, c\tau_{\gamma_D} = 2. \text{ mm}$ 1st dark photon (leading p_T) 0.1 2nd dark photon 0.08 0.06 0.04 0.02 40 50 30 60 80 90