## CMS Simulation (LHE) 14 TeV Fraction of events / 0.1 0.035 0.02 0.035 0.035 0.025 0.025 $|pp| \stackrel{\rightarrow}{\rightarrow} h \stackrel{\rightarrow}{\rightarrow} 2h_1 \stackrel{\rightarrow}{\rightarrow} |2h_D + 2\gamma_D \stackrel{\rightarrow}{\rightarrow} 2h_D + 4\mu$ $\rm m_h = 125~GeV, \, m_{_{N_a}} = 50~GeV, \, m_{_{N_n}} = 1~GeV$ $m_{\gamma_D}$ = 20.0 GeV, $c\tau_{\gamma_D}$ = 0.00 mm 1st dark photon (leading p<sub>T</sub>) 2nd dark photon 0.01 0.005