CMS Simulation (LHE) 8 TeV Fraction of events / 1 GeV $pp \rightarrow h \rightarrow 2n_1 \rightarrow 2n_D + 2~\gamma_D \rightarrow 2n_D + 4\mu$ 0.35 $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_s} = 1 \text{ GeV}$ $m_{\gamma_{D}} = 0.850$ GeV, $c\tau_{\gamma_{D}} = 5$. mm — 1st muon (leading p_⊤) --- 2nd muon 3rd muon 0.3 4th muon 0.25 0.15 0.1 0.05 20 120 40 60 80 100 of μ [GeV]