CMS Simulation (LHE) 8 TeV Fraction of events / 1 GeV $pp \rightarrow h \rightarrow 2n_1 \rightarrow 2n_D + 2~\gamma_D \rightarrow 2n_D + 4\mu$ 0.3 $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_s} = 1 \text{ GeV}$ $m_{\gamma_{\scriptscriptstyle D}}$ = 0.275 GeV, $c\tau_{\gamma_{\scriptscriptstyle D}}$ = 0.5 mm — 1st muon (leading p_T) --- 2nd muon --- 3rd muon 0.25 4th muon 0.2 0.15 0.1 0.05 20 40 60 100 120 80 of μ [GeV]