CMS Simulation (LHE) 8 TeV Fraction of events / 1 GeV $pp \rightarrow h \rightarrow 2n_1 \rightarrow 2n_D + 2~\gamma_D \rightarrow 2n_D + 4\mu$ 0.25 $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_s} = 1 \text{ GeV}$ $m_{\gamma_{\scriptscriptstyle D}} = 0.350 \; \text{GeV}, \; c\tau_{\gamma_{\scriptscriptstyle D}} = 0.1 \; \text{mm}$ 1st muon (leading p_T) 2nd muon 0.2 3rd muon - · - 4th muon 0.15 0.1 0.05 20 40 120 60 80 100 p_{τ} of μ [GeV]