CMS Simulation (LHE) 8 TeV Fraction of events / 1 GeV $pp \rightarrow h \rightarrow 2n_1 \rightarrow 2n_D + 2~\gamma_D \rightarrow 2n_D + 4\mu$ 0.12 $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_D} = 1 \text{ GeV}$ $m_{\gamma_D} = 0.300$ GeV, $c\tau_{\gamma_D} = 0.1$ mm 1st muon (leading p_T) 2nd muon 3rd muon 0.1 4th muon 80.0 0.06 0.04 0.02 20 40 60 80 100 120 p of μ [GeV]