CMS Simulation (LHE) 8 TeV Fraction of events / 1 GeV $pp \rightarrow h \rightarrow 2n_1 \rightarrow 2n_D + 2~\gamma_D \rightarrow 2n_D + 4\mu$ 0.1 $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_s} = 1 \text{ GeV}$ m_{γ_D} = 0.250 GeV, $c\tau_{\gamma_D}$ = 0.05 mm 1st muon (leading p_T)2nd muon3rd muon 80.0 4th muon 0.06 0.04 0.02 60 20 40 80 120 100 p of μ [GeV]