CMS Simulation (LHE) 14TeV TeV $pp \rightarrow h \rightarrow 2n_1 \rightarrow 2n_D + 2\gamma_D \rightarrow 2n_D + 4\mu$ Fraction of events / 1 GeV $m_h = 125 \text{ GeV}, m_{n_s} = 10 \text{ GeV}, m_{n_D} = 1 \text{ GeV}$ $m_{\gamma_{D}}$ = 20 GeV, $c\tau_{\gamma_{D}}$ = 0 mm 0.05 0.04 0.03 0.02 0.01 20 120 40 60 80 100 Mass of Fake μμ [GeV]