CMS Simulation (LHE) 14TeV TeV $pp \rightarrow h \rightarrow 2n_1 \rightarrow 2n_D + 2\gamma_D \rightarrow 2n_D + 4\mu$ $m_h = 125 \text{ GeV}, m_{n_s} = 50 \text{ GeV}, m_{n_p} = 1 \text{ GeV}$ $m_{\gamma_{D}}$ = 20 GeV, $c\tau_{\gamma_{D}}$ = 10 mm

Fraction of events / 1 Ge\

0.05

0.04

0.03

0.02

0.01

20 40 60 80 100 120 Mass of Fake μμ [GeV]