CMS Simulation (LHE) 14 TeV $pp \rightarrow h \rightarrow 2n_1 \rightarrow 2n_D + 2\gamma_D \rightarrow 2n_D + 4\mu$ $m_h = 125 \text{ GeV}, m_{n_s} = 50 \text{ GeV}, m_{n_D} = 1 \text{ GeV}$ m_{γ_D} = 20 GeV, $c\tau_{\gamma_D}$ = 10 mm 1st muon (leading p_T) 2nd muon 3rd muon 4th muon 120 100 40 60 80 of μ [GeV]

Fraction of events / 1 Ge\

0.22

0.2

0.18

0.16

0.14

0.12

0.08

0.06

0.04

0.02

0.1