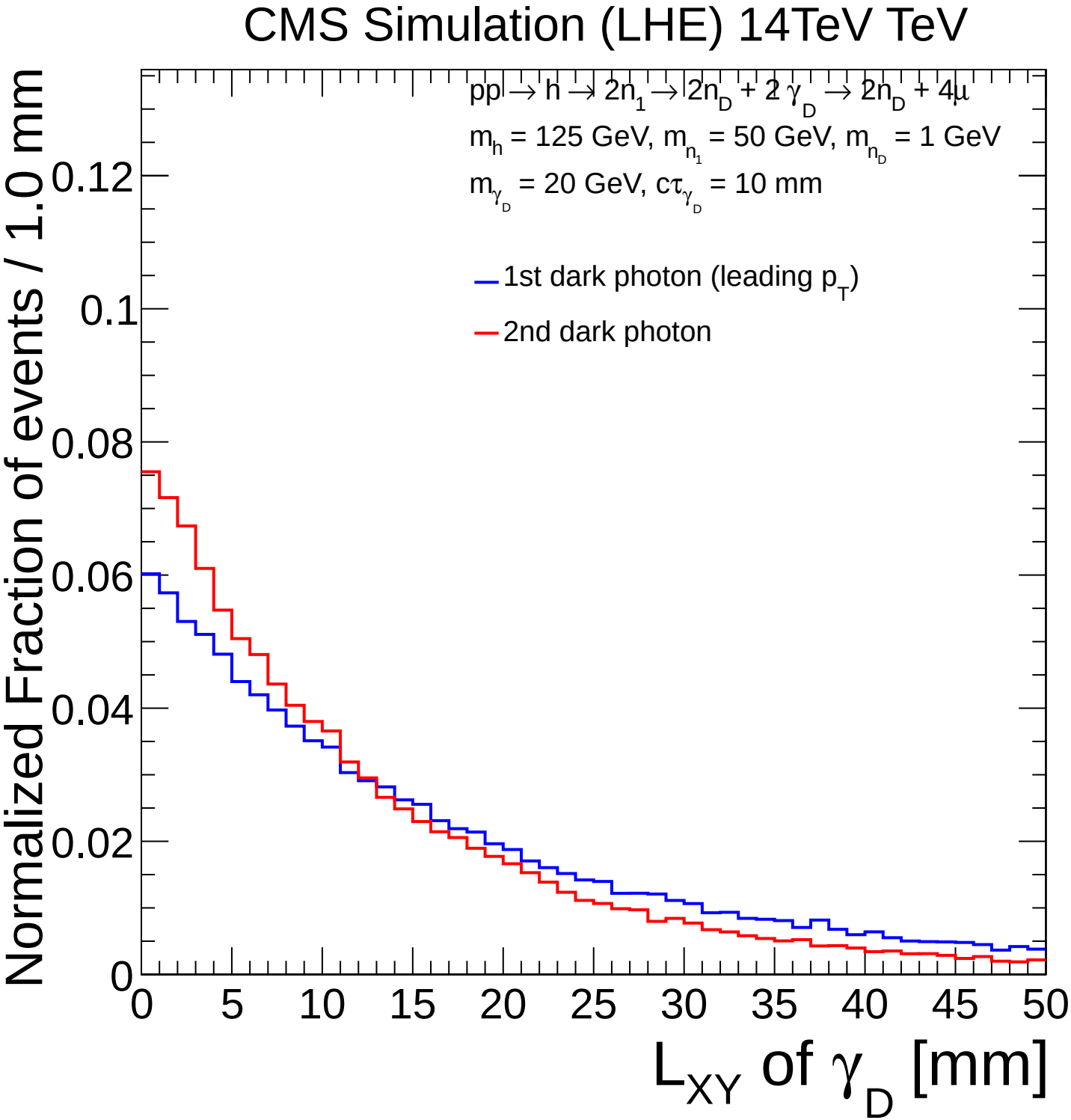
CMS Simulation (LHE) 14TeV TeV
$pp \to h \to 2n_1 \to 2n_D + 2\gamma_D \to 2n_D + 4\mu$
m_h = 125 GeV, m_{n_1} = 50 GeV, m_{n_D} = 1 GeV
m_{γ_D} = 20 GeV, $c\tau_{\gamma_D}$ = 10 mm
1st dark photon (leading p_T)
2nd dark photon
Normalized Fraction of events / 1.0 mm
0
0.02
0.04
0.06
0.08
0.1
0.12
0
5
10
15
20
25
30
35
40
45
50
L_{XY} of γ_D [mm]