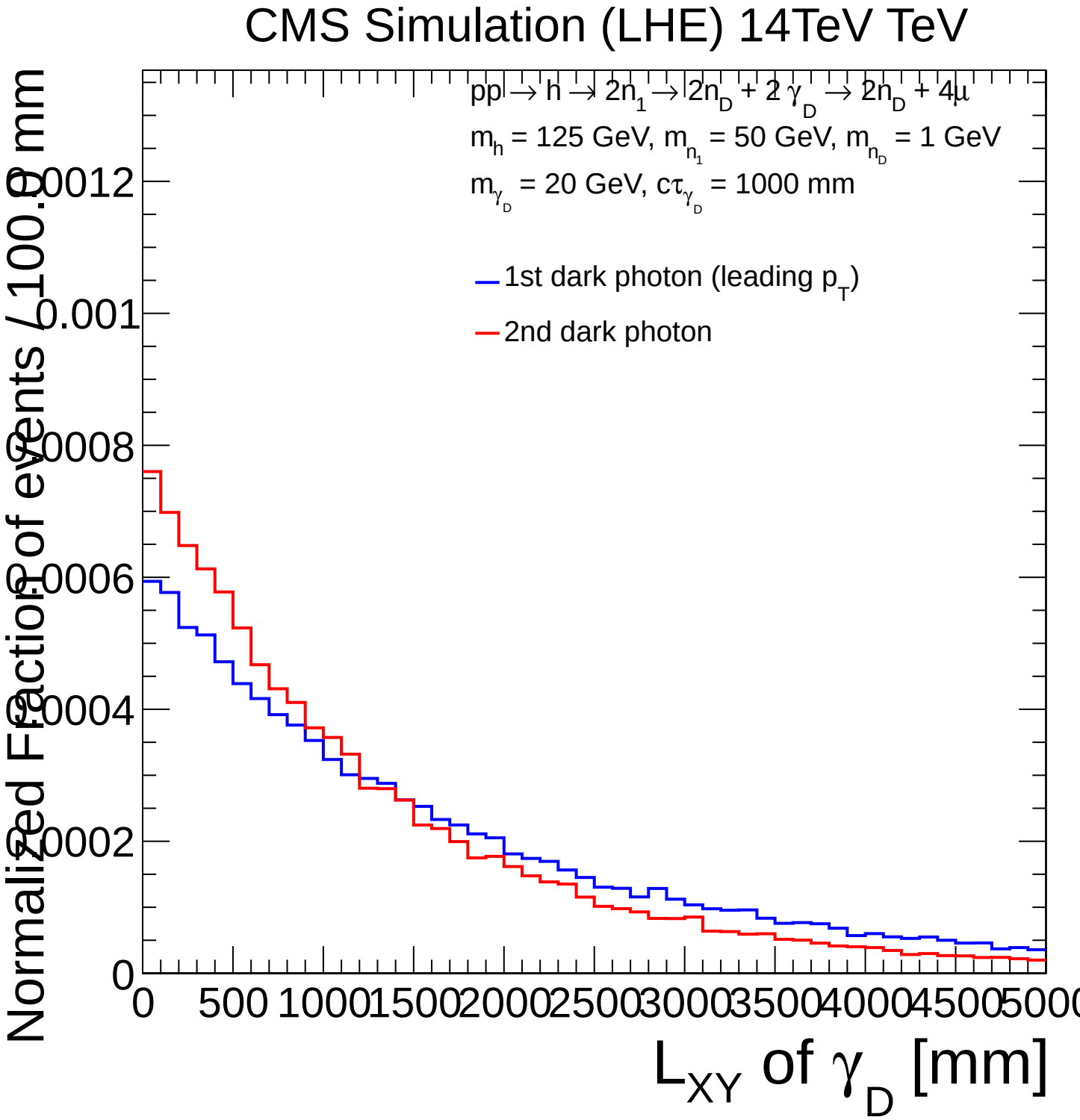
CMS Simulation (LHE) 14TeV TeV
$pp \to h \to 2n_1 \to 2n_D + 2\gamma_D \to 2n_D + 4\mu$
m_h = 125 GeV, m_{n_1} = 50 GeV, m_{n_D} = 1 GeV
m_{γ_D} = 20 GeV, $c\tau_{\gamma_D}$ = 1000 mm
1st dark photon (leading p_T)
2nd dark photon
Normalized Fraction of events / 100.0 mm
0
0.0002
0.0004
0.0006
0.0008
0.001
0.0012
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
L_{XY} of γ_D [mm]