

L1Mu trigger algorithm comparison $1.2 \leq |\eta| \leq 2.4$, 14TeV, PU140

Trigger efficiency

CMS PhaseII Simulation

Prompt L1Mu trigger $p_T \geq 7$ GeV

— $|\text{dxy}| \leq 5$ cm

— $5 < |\text{dxy}| \leq 50$ cm

Displaced L1Mu trigger $p_T \geq 7$ GeV

— $|\text{dxy}| \leq 5$ cm

— $5 < |\text{dxy}| \leq 50$ cm

0

0.1

0.2

0.3

0.4

0.5

0.6

0.7

0.8

0.9

1.0

1.1

0

5

10

15

20

25

30

35

40

45

50

True Muon p_T [GeV]