

L1Mu trigger algorithm comparison  $1.8 \leq |\eta| \leq 2.0$ , 14TeV, PU140

Trigger efficiency

**CMS PhaseII Simulation**

Prompt L1Mu trigger  $p_T \geq 20$  GeV

—  $|\text{dxy}| \leq 5$  cm

—  $5 < |\text{dxy}| \leq 50$  cm

Displaced L1Mu trigger  $p_T \geq 20$  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]