

**CMS** Phase-2 Simulation

$3000 \text{ fb}^{-1}$ , 14 TeV, 200 PU

Events

$10^5$

$10^4$

$10^3$

$10^2$

$10^1$

Event category 1

Signal ( $B_{\tau \rightarrow 3\mu} = 2 \times 10^{-8}$ )

Background

$\sigma_{\text{peak}} = 18 \text{ MeV}$

1.55

1.6

1.65

1.7

1.75

1.8

1.85

1.9

1.95

$m_{3\mu} \text{ (GeV)}$