



- $\text{mumu} \rightarrow \text{ttmumu}$ (emicut 5)
- - - $\text{mumu} \rightarrow \text{ttmumu}$ ($\eta_{\mu^p} < 0.5 \ \&\& \ \text{emicut} = 5$)
- - - $\text{mumu} \rightarrow \text{ttmumu}$ ($\eta_{\mu^p} < 0.5$)
- . - $\text{mumu} \rightarrow \text{ttmumu}$ ($\eta_{\mu^p} < 0.5 \ \&\& \ \eta_{\mu^M} < 5$)
- $\text{mumu} \rightarrow \text{ttmumu}$ ($\eta_{\mu^p} < 0.5 \ \&\& \ \text{emicut} = 5$). SDE1
- - - $\text{mumu} \rightarrow \text{ttmumu}$ ($\eta_{\mu^p} < 0.5 \ \&\& \ \text{emicut} = 5$). HS2
- - - $\text{mumu} \rightarrow \text{ttmumu}$ ($\eta_{\mu^p} < 0.5 \ \&\& \ \text{emicut} = 5$). HS3
- - - $\text{mumu} \rightarrow \text{ttmumu}$ ($\eta_{\mu^p} < 0.5$). HS3
- $\text{mumu} \rightarrow \text{ttmumu}$ ($\eta_{\mu^p} < 0.5$). SDE1