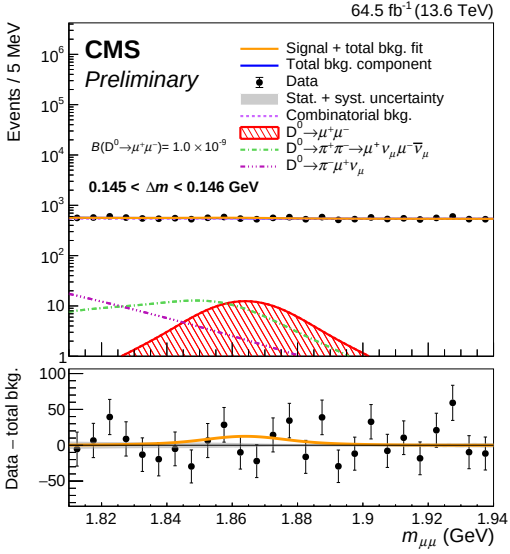
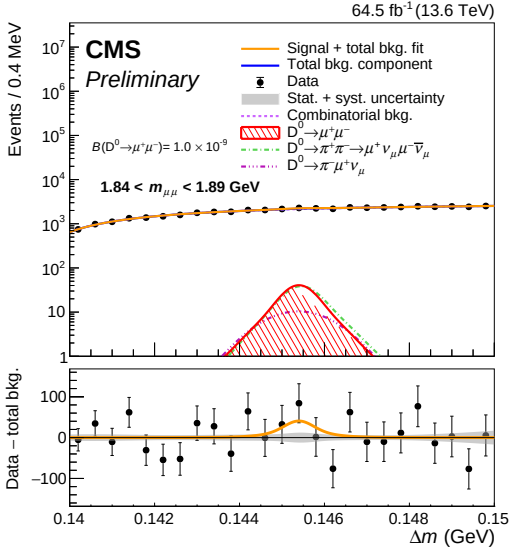

64.5 fb^{-1} (13.6 TeV)
CMS
Preliminary
Signal + total bkg. fit
Total bkg. component
Data
Stat. + syst. uncertainty
Combinatorial bkg.
$D^0 \to \mu^+\mu^-$
$D^0 \to \pi^+\pi^- \to \mu^+\nu_\mu\mu^-\bar{\nu}_\mu$
$D^0 \to \pi^-\mu^+\nu_\mu$
$B(D^0 \to \mu^+\mu^-) = 1.0 \times 10^{-9}$
0.145 < Δm < 0.146 GeV
Events / 5 MeV
Data − total bkg.
$m_{\mu\mu}$ (GeV)


64.5 fb^{-1} (13.6 TeV)
CMS
Preliminary
Signal + total bkg. fit
Total bkg. component
Data
Stat. + syst. uncertainty
Combinatorial bkg.
$D^0 \to \mu^+\mu^-$
$D^0 \to \pi^+\pi^- \to \mu^+\nu_\mu\mu^-\bar{\nu}_\mu$
$D^0 \to \pi^-\mu^+\nu_\mu$
$B(D^0 \to \mu^+\mu^-) = 1.0 \times 10^{-9}$
1.84 < $m_{\mu\mu}$ < 1.89 GeV
Events / 0.4 MeV
Data − total bkg.
Δm (GeV)