The CMS collaboration has measured the differential cross section for the process $t\bar{t}$ production at 13 TeV using 35.9 fb$^{-1}$ of data. The measurement was compared to various theoretical predictions, including POWHEGV2 + PYTHIA8, POWHEGV2 + HERWIG++, and MG5_aMC@NLO + PYTHIA8. The data show good agreement with the predictions, with systematic uncertainties included as shaded bands.