In the CMS Preliminary Data, the graph shows the invariant mass distribution for top quark pairs ($t\bar{t}$) with different background contributions. The data is compared with the SM $t\bar{t}$ prediction and various narrow $Z'$ models. The graph indicates that for $|\Delta y| > 1.0$ and 0 $b$-tags, the data is consistent with the SM expectations within the uncertainties. The lower panel shows the ratio of data to background, which remains close to 1, suggesting good agreement.

- Events: $10^{-1}$ to $10^4$
- Invariant Mass (GeV): 1000 to 6000
- CMS Preliminary Data
- Non-Top Multijet
- SM $t\bar{t}$
- 1 TeV Narrow $Z'$
- 2 TeV Narrow $Z'$
- 3 TeV Narrow $Z'$
- 4 TeV Narrow $Z'$

The graph is plotted with a logarithmic scale for the y-axis and a linear scale for the x-axis, with a total integrated luminosity of 2.6 fb$^{-1}$ (13 TeV).