The plot shows the distribution of events as a function of pseudo-rapidity ($\eta$), with the number of events per 4 GeV bin plotted on the y-axis and pseudo-rapidity on the x-axis. The data is compared to theoretical predictions for different processes:

- **data**
- **$Z \rightarrow ee$**
- **VV**
- **top**

Uncertainties in the data are indicated by the shaded regions. The CMS logo is present, and the plot includes the CMS collaboration's logo. The data is normalized to 19.7 fb$^{-1}$ at 8 TeV, with the integrated luminosity indicated at the top right of the plot.