The CMS collaboration has presented a 95% confidence level (CL) limit on the Higgs boson mass. The limit is based on the observation of events in the VH tag (shape-based analysis) channel with 2 jets and 2 leptons ($2l+2\nu$) decaying to $WW \rightarrow H$.

The limit is calculated using the Standard Model (SM) cross-section expectation, with additional uncertainties. The expected cross-sections are shown as green bands, with the median expected shown as a dotted line. The observed limit is shown as a black line.

The CMS data is a combination of 4.9 fb$^{-1}$ (7 TeV) and 19.4 fb$^{-1}$ (8 TeV), and the observed limit on the Higgs boson mass is shown for two mass points: 7 TeV and 8 TeV. The observed cross-section is 19.4 fb at 8 TeV and 4.9 fb at 7 TeV.

The expected cross-sections are shown with uncertainties of 1σ and 2σ, with the 1σ expected cross-section shown in green and the 2σ expected cross-section shown in yellow.