The CMS collaboration has analyzed data with a total integrated luminosity of 4.9 fb$^{-1}$ (7 TeV) + 19.4 fb$^{-1}$ (8 TeV). The analysis is focused on the invariant mass distribution of events with a top-tagged, $e\mu$ 1-jet signature, where the mass of the Higgs boson is set to $m_H = 125$ GeV.

In the plot, the data distribution is compared with the background processes including:

- $WZ+ZZ+VVV$
- top
- $W\gamma^{(*)}$
- $W+jets$
- $WW$

The CMS collaboration observes a peak mass of 125 GeV, indicating a possible Higgs boson signal.