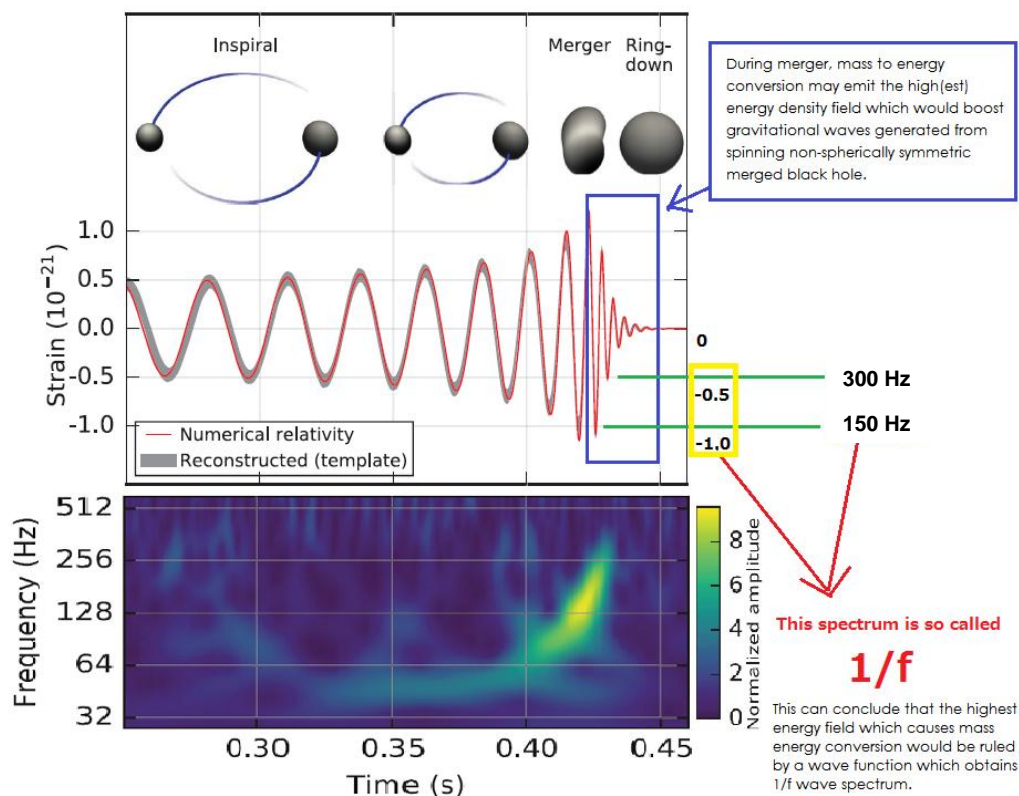


The analysis of the first gravitational wave detection “GW150914” at LIGO

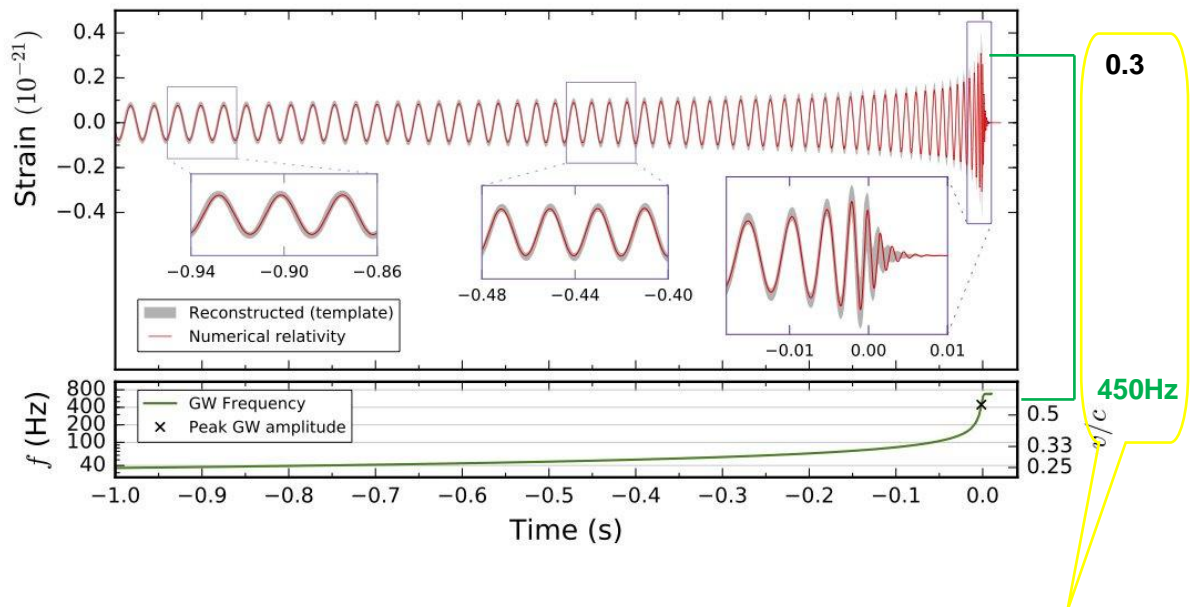
by Ryoji Furui



- 1) The gravitational wave (GW) shows $1/f$ spectrum during two blackholes merger.
- 2) This merger (estimated as quasi-normal mode) seems to have peak amplitude while it is expected less strain by Einstein's GW mechanism.
- 3) If other two already observed but not yet disclosed GWs at LIGO (or more coming detections) shows the same $1/f$ spectrum with a constant value, then those could conclude that the mass energy conversion emits $E=bf$ (E : energy, b : constant) gravitational wave considered at a paper (<http://ryoji.info/theory>)

Additional analysis with newly detection “GW151226” at LIGO

(added on 23, June 2016, revised 11, July 2016)



- 4) We can tell from the picture of GW151226 shown above, that the frequency of GW is about 450Hz when BHs are merged, hence its peak GW amplitude is at 0.0s. And its Strain is about 0.3.
- 5) As the distance from both observed GW sources to the earth is estimated to be the same approx 1.4 billion light-year, *approximate* calculation of 3) with the frequency (applied as \hbar and the strain (applied as E) **could find constant “ b ”**.