GW190814 Factsheet

Lowest mass ratio event to date
Strongest evidence of higher order modes

Observed by: LIGO Hanford, LIGO Livingston and Virgo detectors

Source type: BH and compact object

Date: August 14th 2019

Time of merger: 21:10:39 UTC

Network SNR: 25

Distance: 196 – 282 Mpc

Redshift: 0.05

Chirp Mass: 6.1 $M_{\odot}$

Primary Mass: 23.2 $M_{\odot}$

Secondary Mass: 2.6 $M_{\odot}$

Mass ratio: 0.11

Final Mass: 25.6 $M_{\odot}$

Spin Perpendicular to Orbital Plane: 0.0

Spin Parallel to Orbital Plane: 0.0

Spin of Final BH: 0.28

SNR in Octupole Mode: 5.2 – 7.9

# GW cycles (above 20Hz): 300 cycles

Sky Area: 18 deg$^2$

Merger Rate: 1 – 23 Gpc$^{-3}$ yr$^{-1}$

Initial Public Alert Delay: 20 min

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