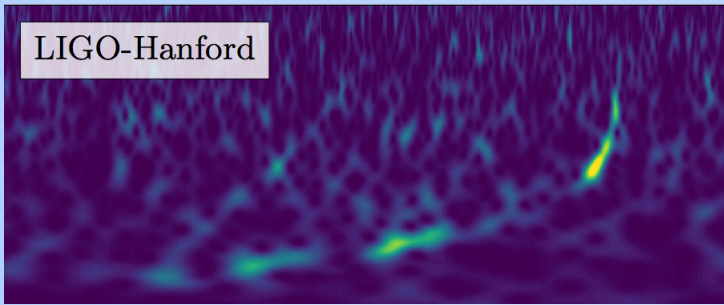
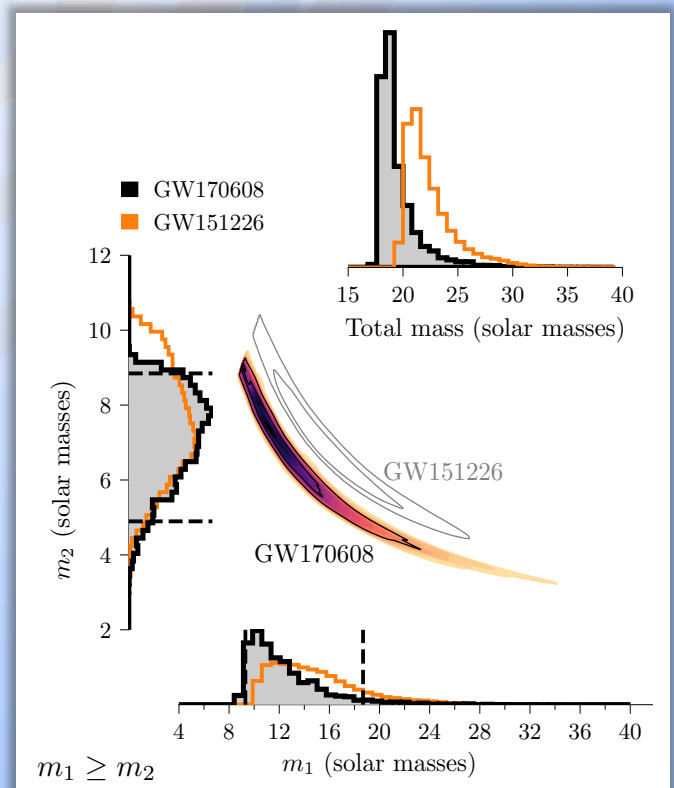


GW170608 FACTSHEET



observed by	H, L
source type	black hole (BH) binary
date	08 June 2017
time of merger	02:01:16 UTC
signal-to-noise ratio	13
false alarm rate	< 1 in 3 000 years
distance	0.7 to 1.5 billion light-years
redshift	0.04 to 0.1
total mass	18 to 24 M_{\odot}
primary BH mass	9 to 19 M_{\odot}
secondary BH mass	5 to 9 M_{\odot}
mass ratio	0.3 to 1.0
remnant BH mass	17 to 23 M_{\odot}
remnant BH spin	0.64 to 0.72
remnant size (effective radius)	47 to 63 km
remnant area	2.7 to 5.0×10^4 km ²
effective spin parameter	-0.01 to 0.30
effective precession spin parameter	unconstrained
peak GW luminosity	1.8 to 3.9×10^{56} erg s ⁻¹
radiated GW energy	0.68 to 0.91 $M_{\odot}c^2$

duration from 30 Hz	~ 2 s
# of GW cycles from 30 Hz	~ 100
signal arrival time delay	arrived at H ~ 7 ms before L
HL sky area†	~ 520 deg ²
peak GW strain (10^{-22})	~ 4 (H), 3 (L)
peak stretch of interferometer arm	~ ± 0.8 am (H), 0.6 am (L)
frequency at peak GW strain	453 to 610 Hz
wavelength at peak GW strain	492 to 662 km
remnant ringdown frequency	745 to 1013 Hz
remnant damping time	1.0 to 1.4 ms
consistent with general relativity?	passes all tests performed



Images: time-frequency traces (top),
mass distributions (bottom right)

GW=gravitational wave, M_{\odot} =1 solar mass= 2×10^{30} kg,
am=attometer (10^{-18} m), H/L=LIGO Hanford/Livingston
Parameter ranges are 90% credible intervals.

†90% credible region