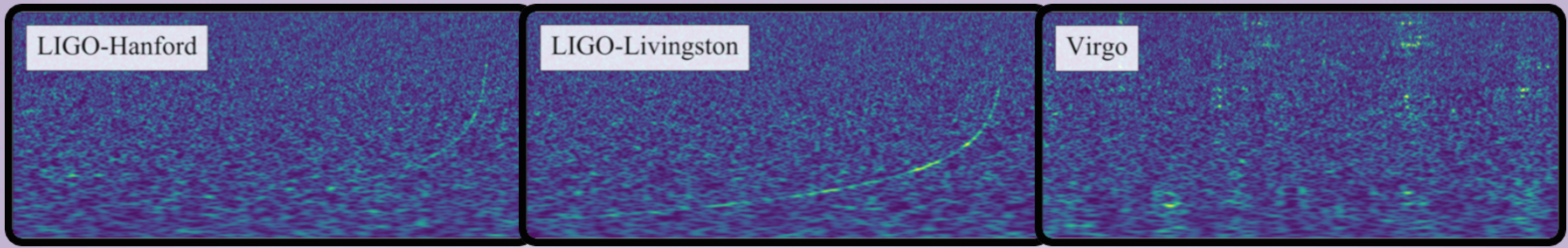
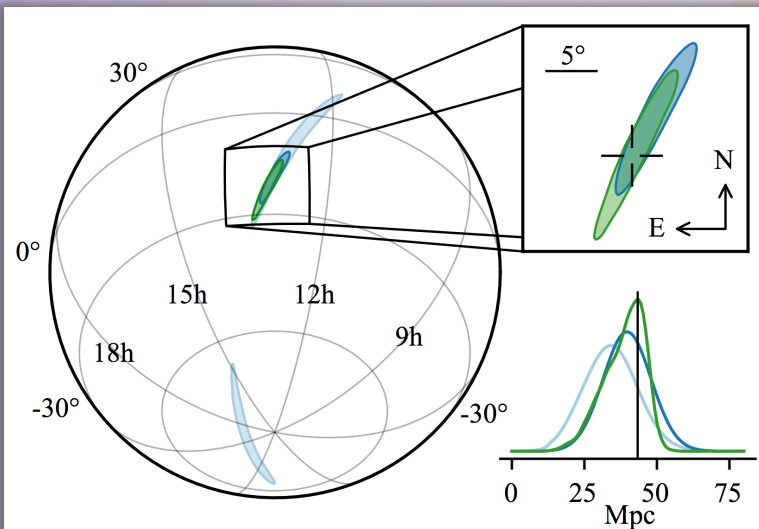


GW170817 FACTSHEET



observed by	H, L, V	trigger identification latency*	6.2 min
source type	binary neutron star (NS)	initial astronomer alert latency*	27 min
date	17 August 2017	HLV sky map alert latency*	5 hrs and 14 min
time of merger	12:41:04 UTC	HLV sky area [†]	28 deg ²
signal-to-noise ratio	32.4	RA, Dec	13 ^h 09 ^m 48 ^s , -23°22'53"
false alarm rate	< 1 in 80 000 years	sky location	in Hydra constellation
distance	85 to 160 million light-years	# of EM observatories that followed the trigger	~ 70
total mass	2.73 to 3.29 M _⊙	also observed in	gamma-ray, X-ray, ultraviolet, optical, infrared, radio
primary NS mass	1.36 to 2.26 M _⊙	host galaxy	NGC 4993
secondary NS mass	0.86 to 1.36 M _⊙	viewing angle (without and with host identification)	< 56° and < 36°
mass ratio	0.4 to 1.0	Hubble constant inferred from host galaxy identification	62 to 82 km s ⁻¹ Mpc ⁻¹
radii of NSs	≤ 15 km	radiated GW energy	> 0.025 M _⊙ c ²
effective spin parameter	-0.01 to 0.17	GW speed deviation from speed of light	< few parts in 10 ¹⁵
effective precession spin parameter	unconstrained		
duration from 30 Hz	~60 s		
# of cycles from 30 Hz	~3000		



Images: time frequency traces (top), sky map (left, HL = light blue, HLV = dark blue, improved HLV = green, source location = cross-hair)

GW=gravitational wave, am=attometer=10⁻¹⁸ m,
M_⊙=1 solar mass=2x10³⁰ kg,
H/L=V=LIGO Hanford/Livingston, V=Virgo

Parameter ranges correspond to 90% credible intervals.

*referenced to the time of merger
[†]90% credible region