

Testing General Relativity with GWTC-3

LIGO Virgo KAGRA Webinar
Thursday 27 January 2022
1400 UTC (9AM US Eastern)

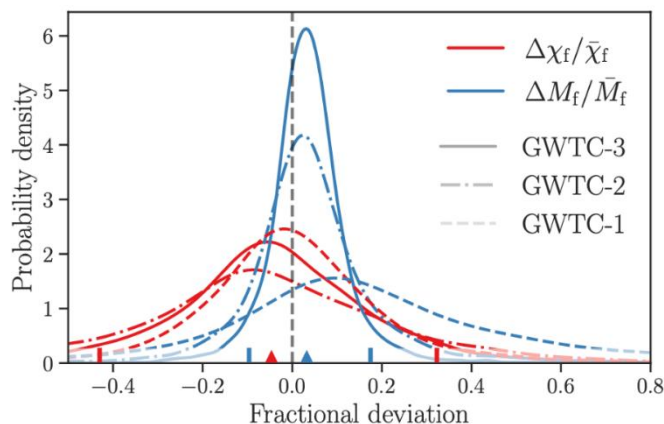
Abstract

With the most recent gravitational wave transient catalog GWTC-3, the LIGO/Virgo detectors have detected about 90 compact binary mergers, including binary black holes, binary neutron stars, and neutron star--black hole pairs. Among the 90 events, 35 compact binary mergers from the second half of the third observing run (O3b) were reported for the first time. In this webinar we discuss the results from the paper, where we combined the new observational data with the older data to seek possible departures from GR.

Our webinar will present results from our recent paper <https://arxiv.org/abs/2112.06861>.

Register online at:

<https://bit.ly/33vezGv>



Fractional difference between the mass (blue) and spin (red) from the inspiral and post-inspiral parts of the gravitational waveform, inferred from GWTC-3 and previous analyses. The grey vertical line shows the GR value of zero and the results show excellent consistency with GR. (Fig. 4 from [our paper](#)).