

# Results from the O3 observing run of the LIGO-Virgo Collaboration

*Tuesday 14 September 2021 10:30 (15 minutes)*

The third observation run (O3) of Advanced LIGO and Advanced Virgo started in April 2019 and ended in March 2020, with improved sensitivities compared to the previous observing run. The presentation will review the science results achieved during the O3 run, that include the GWTC-2, GWTC-2.1 catalogs of compact binary mergers and some exceptional events: GW190412, the merger of two black holes with asymmetric masses; GW190425, the second observed binary neutron star merger; GW190521, the first detection of an intermediate mass black hole; GW190814, a system with a secondary that could be either a black hole or a neutron star; GW200105 and GW200115, the first detected neutron star-black hole binary mergers.

## Abstract field

Multi-Messenger

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