

# **The beginnings of gravitational wave astronomy**

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The first detection of gravitational waves was made in September 2015 with the measurement of the coalescence of two  $\sim 30$  solar mass black holes at a distance of about 1 billion light years from Earth. The talk will provide a review of more recent measurements of black hole events as well as the first detection of the coalescence of two neutron stars and the beginning of multi-messenger astrophysics. The concepts used in the instruments and the methods for data analysis that enable the measurement of gravitational wave strains of  $10^{-21}$  and smaller will be presented. The talk will end with a discussion of prospects for the field.