

# Studying gravitational waves with LIGO

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Gravitational-wave astronomy has made a tremendous stride forward with detections during the first observing run of the Advanced Laser Interferometer Gravitational-wave Observatory (LIGO). The signals have been identified as originating from the merger of black holes, whose parameters it was possible to infer. This discovery has profound implications. Gravitational waves provide information on some of the most energetic astrophysical events, revealing unique insights into the nature of gravity and our universe.

In this talk I will explain how the detections were made and how gravitational-wave signals are studied, and discuss the results of this analysis on LIGO's first observations.