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The Virgo experiment and the hunt for gravitational waves: status, recent results and prospects.

Thursday 24 October 2024 10:40 (40 minutes)

Since the first discovery in 2015, the field of gravitational-wave searches has strongly developed, with a total of 90 confirmed detections during the first three observing runs of the Advanced LIGO/Virgo detectors. In this talk, I will present the current status of the Virgo detector and its contribution in the global network of Earth-based detectors. Then, I will discuss the various searches that are currently carried on, along with the recent findings and their scientific implications. Finally, I will discuss future upgrades of the detector and the prospects for the coming decades.

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