ID de Contribution: **3** Type: **Invited talk**

The detection of Continuous Gravitational Waves in the Advanced Detector Era

jeudi 1 juin 2017 14:00 (35 minutes)

The recent sensitivity improvements of the worldwide advanced gravitational-wave detector network has allowed us to detect the first transient gravitational-wave signal, marking thus the official beginning of the gravitational-wave astronomy. We have then started to hone the comprehension of some of the objects populating our Universe. A broader picture would be however provided by the detection of continuous-wave signals, which are emitted by rotating neutron stars with a non-axisymmetric deformation.
After presenting the most stringent results obtained to date by the LIGO-Virgo collaboration, I will focus on the prospects for detecting continuous gravitational waves by mainly exploiting innovative strategies to search for such class of signals in the current long-awaited advanced detector era.

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Classification de Session: Continuous Waves and Stochastic Signals

Classification de thématique: Continuous waves and stochastic signals