

Searching for continuous gravitational waves: the remainder of the zoo

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While the prototypical source of continuous gravitational waves is represented by asymmetric spinning neutron stars, there are several other mechanisms which are expected to cause the emission of long-lasting semi-periodic signals which, if detected, would provide a wealth of information about several aspects of fundamental physics, astrophysics and cosmology.

They include newborn magnetars, ultra-light dark matter and sub-solar mass primordial black holes, object of a very intense research activity in the gravitational wave community.

In this talk I will briefly review these sources, discussing their emission processes, the main data analysis techniques used for their search, recent upper limits obtained by the LIGO-Virgo-Kagra Collaboration and future prospects.

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