

## **Detectability of continuous gravitational waves from isolated neutron stars in the Milky Way: the population synthesis approach**

We investigate the visibility of single Galactic pulsars in the gravitational waves. We integrate the signal for a period of one year, a comparable length to the current O3 LIGO/Virgo observing run, by computing the interferometer response and comparing it to the design sensitivities of LIGO and Virgo detectors. With an assumption of single radio pulsar population model, classical rotating quadrupole GW emission model (with parameterized and decaying ellipsoidity of the NS), and by defining a detection SNR equal to 8, we find observability of any single pulsar within our Galaxy unlikely.

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