

Abstract Submitted
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Simulation of a Galactic Population of Gravitational Wave Emitting Pulsars¹ GIOVANNI SANTOSTASI, McNeese State University — We have simulated using a Monte Carlo process few plausible galactic populations of Gravitational Wave emitting neutron stars. The simulation is based on a range of astrophysical models to determine statistical distributions of neutron stars' parameters that are relevant to the search of Gravitational Waves through detectors as LIGO or VIRGO (and the advanced versions of such detectors). In particular we have focused on neutron stars' spatial distribution in the Galaxy, proper motion, frequency and spin-down distributions and likely ellipticities. Some preliminary results of our simulations with interesting implications for the Gravitational Wave detection are discussed.

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