

Binary Neutron Star merger rate predictions from observations of dwarf galaxies

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Binary Neutron Star (BNS) mergers are interesting events in the field of multi-messenger astronomy because they are promising sources of detectable gravitational wave signals and electromagnetic transients. Here I present a new method to determine the rate of BNS mergers based on observational evidence for one such event having occurred in the dwarf galaxy Reticulum II. We compare results with other methods reported in the literature and discuss the impact on expected rate of events to be detected by the ground-based gravitational wave observatory LIGO.

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