Observing gravitational waves from neutron stars

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ABSTRACT: Our current theoretical and observational understanding of neutron stars is still rather limited, both concerning the intricate dynamics (glitches, superfluidity, ...) as well as more fundamental properties such as the composition and the equation of state. Future observations of gravitational waves from neutron stars will offer a unique and complementary observational window, and could greatly help to improve this picture. In this talk I want to review the current status of the search for gravitational waves from neutron stars, within the LIGO scientific collaboration, and discuss future plans and prospects for this search.