



Institut de recherche sur les lois fondamentales de l'univers

ESNT Seminar

Friday 08/12/2017, 11h-12h

Bat 703, DPhN salle de séminaires 135, CEA Saclay, Orme des Merisiers

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Gravitational waves from neutron star mergers

The recent detection of gravitational waves from a neutron star merger marks a breakthrough in astrophysics with far-reaching implications especially for nuclear physics. Constraining the nuclear equation of state and the stellar structure of neutron stars through gravitational-wave observations represents a major goal of these experiments. We review recent constraints from the detection of GW170817.

Moreover, we discuss prospects for deducing the equation of state and neutron star properties from future gravitational-wave observations.

This seminar is organized in the framework of the first session (7-8th December 2017) of the ESNT workshop on "Nuclear data inputs and astrophysical processes. Nuclear structure and equation of state".

The detailed program is available on: <http://esnt.cea.fr/Phocea/Page/index.php?id=76>

