

## Neutron stars –the natural nuclear physics laboratories

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Neutron stars are natural laboratories for studying strongly correlated matter in extreme conditions. In such an environment, exotic components, such as hyperons can appear. Their impact is significant on the mass-radius relation for the cold neutron stars but also on the thermal quantities that are essential for describing violent phenomena such as supernovae explosions or binary neutron star mergers. In this talk I will present a finite temperature equation of state for hypernuclear matter, and I will discuss the influence of hyperons on the neutron star observables such as mass, radius and gravitational waves emitted from merging events.

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