## SÉMINAIRE du PÔLE THÉORIE



## LABORATOIRE DE PHYSIQUE DES DEUX INFINIS IRÈNE JOLIOT-CURIE



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## Nuclear interaction through the scopes of nuclear matter

Two nucleons interact with each other by nuclear force in a bound state. In nature, it occurs either inside a terrestrial nucleus or at the core of a neutron star. The non-perturbative nature of the interaction manifested inside these enormously different systems makes the subject so fascinating and at the same time very difficult to crack down. With the usage of various types of density functionals, I will try to explain how experimental data on nuclei in terrestrial conditions are directly connected to the properties of neutron stars. I will resort to various properties of nuclear matter for this purpose.

Tuesday 6<sup>th</sup> February 2024, 14h00 IJCLab, Build. 100, Room A018