



Séminaire
Commun

Structure et Dynamique Nucléaire

Expérience-Théorie

**Anthea
FANTINA
GANIL**

"Nuclear physics inputs for core-collapse supernova and neutron-star physics"

Compact stars such as neutron stars and supernovae are unique laboratories to probe matter in extreme conditions. Nuclear physics experiments, in tandem with astrophysical observations, can give valuable insight in to the properties of dense matter encountered in these stellar objects.

In this seminar, I will discuss the importance of some nuclear physics inputs in the description of these compact stars. In particular, the impact of nuclear masses of neutron-rich nuclei for the compact-star modelling will be discussed. Moreover, being the dense matter found in neutron stars and supernovae very neutron rich, a correct description of the symmetry-energy contribution to the nuclear energy is of great importance. The role of the symmetry energy on some properties of the neutron-star structure and composition will be addressed.

Vendredi 23 Mars 2018, 11h00

IPN, bât. 100A, salle A018



UNIVERSITÉ
PARIS
SUD

université
PARIS-SACLAY

CONTACT

Y.BLUMENFELD: yorick@ipno.in2p3.fr -0169154517
G.HUPIN: hupin@ipno.in2p3.fr - 0169156506