SEMPARIS – Séminaires en région parisienne

http ://string.lpthe.jussieu.fr/semparis/

Particle Theory Seminar of LPT Orsay

Mardi 27 Août 2019, 14 :00
LPT, 114(This is the third of a series of lectures on neutron stars.)
Domaines : nucl-th

Titre : *Neutron star cooling theory*

Orateur : **Natsumi Nagata (Tokyo University)**

Résumé : *Neutron stars cool down via neutrino and photon emissions. The theory of neutron star cooling is now established, and in particular the so-called minimal cooling paradigm is found to be in good agreement with observations. In this third lecture, I will discuss the neutron star cooling theory, with particular emphasis on the importance of nucleon superfluidity and out-of-beta-equilibrium effects. I will also show some recent observations, which have interesting implications for the neutron star cooling theory.*