

Service de Physique Nucléaire
SÉMINAIRE

Vendredi 19/05/2017, 11h00-12h00

CEA Saclay, Orme des Merisiers Bat 703, p 135 salle visio-conférence

Constraining Gravity with Hadron Physics: Neutron
Stars, Modified Gravity and Gravitational Waves

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The finding of Gravitational Waves by the aLIGO and VIRGO scientific collaborations opens opportunities to better test and understand strong interactions, both nuclear-hadronic and gravitational. Assuming General Relativity holds, one can constrain hadron physics at a neutron star. But precise knowledge of the Equation of State and transport properties in hadron matter can also be used to constrain the theory of gravity itself. I review a couple of these opportunities in the context of modified $f(R)$ gravity, the maximum mass of neutron stars, and progress in the Equation of State of neutron matter from the effective theories of QCD.

Le cafe sera servi 10 minutes avant

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