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Seminaire exceptionnel
Seminaire du LPTENS

Vendredi 18 Mai 2018, 11 :30
LPTENS, ENS Physics Department third floor room L357
Domaines : hep-th

Titre : *Compact binary systems in scalar-tensor theories*

Orateur : **Laura Bernard (Lisbon)**

Résumé : *The observations of gravitational waves from coalescing compact binary systems allow us to test gravity in its strong field regime. In order to constrain deviations from general relativity, one also has to build template waveforms for specific alternative theories of gravity. In this talk, I will present the extension of a post-Newtonian Lagrangian approach to massless scalar-tensor theories. I will derive the equations of motion of a compact binary system at 3PN order in harmonic coordinates. I will conclude by a short discussion on tidal effects.*
