



Séminaire de Physique Théorique

Jeudi 16 Octobre 2008

à 11h00 à l'auditorium

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Fundamental physics with gravitational waves

Résumé : Gravity Wave (GW) experiments are now entering a mature era when a detection is likely to happen soon. I will give an overview of presently active and near future experiments, which are of two types : interferometers and resonant antennas. While the former are more performant than the latter, I will explain why resonant antennas can still be useful. From the theoretical point of view, if GW detection is of clear and outstanding astrophysical relevance, I will make the case for the importance of GW for "fundamental" physics, with specific reference to coalescing compact objects (neutron stars, black holes), the astrophysical systems where gravity is the strongest.