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SÉMINAIRE du SPP

Christian Marinoni
(Centre de Physique Théorique, Marseille)

Testing Gravity on Large Cosmological Scales

The Origin of the Large Scale Structure is one of the key issue in Cosmology. A plausible assumption is that structures grow via gravitational amplification and collapse of density fluctuations that are small at early times. The growth history of cosmological fluctuations is a fundamental observable which helps in hunting for evidences of new physics, currently missing from our picture of the universe, but potentially crucial to explain its past, present and future history.

I'll show how, using the VVDS data, we have traced the gradual growth of structures over a period of nearly 9 billion years and how we have used this observable to discriminate between different gravitational models. I'll also discuss how the measurement of the cosmic growth rate provides an alternative, independent, probe to understand the origin of the accelerated expansion of the universe.

Lundi 24 septembre 2007 à 15 heures

Salle André Berthelot, bât. 141
Le café sera servi 15 minutes avant

NB : *La présentation d'une carte d'identité ou d'un passeport est exigée à l'entrée du centre. Tous les auditeurs extérieurs sont priés de prévenir à l'avance de leur visite Emilie Chancrin, tél. 01 69 08 23 50 (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).*