



Irfu

Institut de recherche
sur les lois fondamentales
de l'Univers

**Séminaire
SPP**

Lundi 23/09/2013, 11h00-12h00

CEA-Saclay Bat 141, salle André Berthelot

The large-scale structure of the Universe as seen by Planck

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One of main results of the 2013 data release of the Planck Collaboration is the first full-sky reconstruction of the lensing potential. The lensing potential is the projection on the sky of all the matter density fluctuations from today up to the last scattering surface and therefore constitutes the most complete information on the matter distribution at high redshift.

In this talk, I will explain how the lensing potential, a quantity related to the large-scale structure of the Universe, can be reconstructed from observations of the anisotropies of temperature of the Cosmic Microwave Background (CMB). I will then present in details the Planck lensing map and describe its use for cosmological studies, from improved constraints on cosmological parameters to joint analysis with current and future large-scale structure surveys.

Le café sera servi 10 minutes avant.

NB : La présentation d'une pièce d'identité est exigée à l'entrée du centre. Tous les auditeurs extérieurs sont priés de prévenir à l'avance Martine Oger, tél. 01 69 08 23 50, e-mail : martine.oger@cea.fr. (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).