



## *Séminaire du Laboratoire de l'Accélérateur Linéaire*

**Aurélien Benoit-Lévy**

University College London

**Mardi 27 Janvier 2015 à 11 :00**

## **News from the Dark Energy Survey**

The Dark Energy Survey (DES) is a next-generation galaxy photometric survey designed to study the properties of the Dark Energy using four main cosmological probes : galaxy clustering on large scales, weak gravitational lensing, galaxy-cluster abundance, and supernova distances. During the northern fall of 2012 the DES collaboration installed and commissioned DECam, a 570 mega-pixel optical and near-infrared camera with a large 3 sq. deg. field of view, set at the prime focus of the Víctor M. Blanco 4-meter telescope in CTIO, Chile. A Science Verification (SV) period of observations, lasting until late February 2013, followed the DECam commissioning phase, and provided science-quality images for almost 200 sq. deg. at the nominal depth of the survey. The first of five observing seasons then went on from August 2013 to February 2014. At the end of the five seasons, DES will have mapped an entire octant of the southern sky to unprecedented depth, measuring the position on the sky, redshift and shape of almost 300 million galaxies, together with thousands of galaxy clusters and supernovae. In this talk, I will present the current status of the project and the first scientific results of the survey, with a focus on the cross-correlations between the DES data and the CMB observations by Planck and SPT.

**Salle 101 du LAL - Bât. 200, Orsay**

Thé et café seront servis 1/4h avant le séminaire



Responsable : N. Delerue (seminaires@lal.in2p3.fr)- <http://www.lal.in2p3.fr>