Marc Betoule

LPNHE

Mardi 11 Fevrier 2014 à 11 :00

Improved cosmological constraints from a joint analysis of the SDSS and SNLS supernova surveys

We present recent improvements in cosmological constraints from type-Ia supernovae obtained in a joint analysis of the SDSS-II and SNLS surveys. Our analysis benefit from better understanding of systematic uncertainties associated to the Hubble diagram of SNe-Ia, in particular from sub-percent level accuracy in the relative flux calibration of the SDSS and SNLS. These improvements enable to take full advantage of the large statistics (740 SNe) now available. Our joint sample delivers the most sensitive constraints on Dark Energy to date, and is found compatible with a cosmological constant. In combination with the recent CMB measurement from Planck, we obtain a measurement of the constant equation of state parameter w in a flat universe with an accuracy better than 6

Salle 101 du LAL - Bât. 200, Orsay

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