

## **Semi-analytical computation of the non-linear matter power spectrum**

*vendredi 22 juillet 2011 15:35 (15 minutes)*

I will discuss the new numerical implementation in CLASS of two semi analytical methods for computing the matter power spectrum, namely the one-loop and Time Renormalization Group method. I will present our result compared against accurate N-body simulation and the halofit method on the BAO region. I will also discuss about the new implementation of the one-loop method, showing a great improvement over the more commonly used one.

**Auteurs principaux:** AUDREN, Benjamin (EPFL); LESGOURGUES, Julien (EPFL, CERN)

**Orateur:** AUDREN, Benjamin (EPFL)

**Classification de Session:** Cosmology and Gravity