



ID de Contribution: 18

Type: Non spécifié

## Preliminary Results of Growth-Rate Measurement using Simulated LSST SNe Ia

*jeudi 14 décembre 2023 09:40 (20 minutes)*

Analyzing the distribution of peculiar velocities for a sample of objects enable us to measure the growth-rate of cosmic structure ( $f\sigma_8$ ), which is directly linked to the theory of gravity assumed in the cosmological model. In this work we measure peculiar velocities of SNeIa by comparing their estimated distances with redshifts. We recover the SNeIa peculiar velocities through the residual of the Hubble Diagram and we measure  $f\sigma_8$ .

In this work we have used mocks from Outer Rim N-body simulations to obtain realistic velocities for the simulated SNeIa. Using the LSST observing strategy and **SNsim** survey simulator, we have simulated realistic light-curves. We present the first preliminary results on  $f\sigma_8$  from LSST SNeIa, under simple assumptions on the selection function.

**Auteur principal:** ROSSELLI, Damiano (CPPM)

**Orateur:** ROSSELLI, Damiano (CPPM)

**Classification de Session:** Science talks