

Angular Bispectrum of Galaxy Number Counts for Photometric Surveys

mercredi 5 novembre 2025 17:20 (20 minutes)

Upcoming surveys of cosmic structures will probe scales ranging from the nonlinear regime to scales close to the cosmological horizon. This opens the door to testing the Λ CDM model, as well as early universe scenarios with primordial non-Gaussianity. Modeling the galaxy angular bispectrum is particularly challenging, as it requires accounting for nonlinear dynamics and light-cone projection effects, which lead to computationally demanding numerical integrations. In this talk, I will present the theoretical framework and numerical setup we have developed to evaluate, for the first time, the angular bispectrum on the light cone, including redshift binning and without relying on the Limber approximation. This provides a new way to extract information from the photometric surveys of Euclid.

Auteur: MONTANDON, Thomas (Laboratoire Univers et Particule de Montpellier (LUPM))

Orateur: MONTANDON, Thomas (Laboratoire Univers et Particule de Montpellier (LUPM))