ID de Contribution: **5** Type: **Non spécifié**

A Gaussian ansatz beyond the Zeldovich approximation

mercredi 28 juin 2023 09:40 (30 minutes)

We present a new approach to model the gravitational dynamics of large-scale structures, where we follow the evolution of the probability distribution of the displacement field. This provides a nonperturbative scheme that goes beyond shell crossing and the truncations of the power spectra on nonlinear scales directly arise from the equations of motion. Although the density power spectrum is only recovered up to a smooth drift on BAO scales, the predicted density correlation function agrees with numerical simulations within 2% from BAO scales down to 7 Mpc/h at z≥0.35, without any free parameter.

Auteur principal: VALAGEAS, Patrick (CEA Saclay)

Orateur: VALAGEAS, Patrick (CEA Saclay)