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Towards the angular clustering of ALHAMBRA luminous red galaxies

S. Gracia-Gracia[1], C. Hernández-Monteagudo[1], and P. Arnalte-Mur[2]

[1] Centro de Estudios de Física del Cosmos de Aragón (CEFCA), Plaza San Juan, 1, Planta-2, E-44001, Teruel, Spain.
[2] Institute for Computational Cosmology, Durham University, South Road, Durham DH1 3LE, UK.

Abstract

The cosmological theory makes clear cut prediction for the clustering properties of matter in our Universe. It is customary to assume that galaxies are biased samplers of the density field. Theory predicts that matter fluctuations are Gaussian distributed, completely determined by second order moments like the correlation function $\xi(x)$ or the power spectrum $P(k)$. Here we study two different methods to estimate the power spectrum of any generic distribution of galaxies with a window function, that will be applied to the ALHAMBRA survey in the near future.