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Cosmology from Large Scale full-shape analyses combining 2PCF and 3PCF

Tuesday 15 July 2025 15:00 (30 minutes)

In this talk, we present, for the first time, cosmological parameter constraints obtained by jointly analysing the two-point correlation function (2PCF) and the three-point correlation function (3PCF). This work marks the final step of a research programme which, over the past few years, has bridged the gap between configuration space and Fourier space, both in terms of observational measurements and theoretical modelling. We will demonstrate how incorporating the 3PCF alongside the 2PCF enhances the constraining power of full-shape analyses, reaching a level comparable to that of Fourier space studies —all while avoiding the complications associated with window functions.

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