Harmonic high-order statistics in cosmology

Dr. Antonino Troja (IFT/UNESP)

With the developing of precision cosmology, high-order statistics started to play a key role in the analysis of incoming data. Especially in the case of spherical distributed data, where harmonic statistics help to get tighter constraints on cosmological parameters. My work is focused on bispectrum and trispectrum, showing how it is possible to lift degeneracies and improve the cosmological results.