

Cosmological probes with cosmic voids: advanced modelling and the latest results

Thursday 17 July 2025 16:30 (30 minutes)

The ISW and gravitational lensing signals of cosmic large-scale structures probe the growth of structure in the low-redshift cosmic web. In this talk, I will summarise the recent results on detecting cosmic voids in the galaxy distribution, and their cross-correlations with CMB lensing and temperature maps, using different surveys such as DES, DESI, Euclid, Pan-STARRS, and also Gaia quasars. I will also explain how we are using the Gower St simulations with hundreds of different cosmologies to build a new modelling framework for cosmological constraints using cosmic voids.

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