

Revisiting isocurvature perturbations

Thursday 11 January 2024 17:00 (30 minutes)

Isocurvature perturbations, despite being strongly constrained by current CMB data, enjoy continuing popularity in recent publications.

Nonetheless, the nature of isocurvature perturbations is neglected in many textbooks. There are not few who have little idea about it.

In this talk, we will revisit isocurvature by starting from the basic definition. We have a new perspective on the evolution of isocurvature modes in the long-wavelength limit, how they mix and behave in more complicated cosmic histories. We will have a first glimpse at the effect on the CMB and on popular cosmological tensions.

Presenter: GERLACH, Christopher