

Poster: Non-linear analysis of primordial perturbations

The non-Gaussian tail of the PDF of primordial scalar perturbations is a key element to determine the abundance of primordial black holes. These primordial non-Gaussianities arise, at least partly, from the non-linear, super-horizon dynamics of inflationary perturbations. Such non-linearities have been computed by combining classical non-linear techniques (the δN formalism) with the stochastic formalism of inflation. In our work, we reconsider the underlying assumptions and implications of this calculation using both numerical and analytical methods, assessing the validity of several approximations commonly used in the literature.

Based on work currently in progress with Guillermo Ballesteros, Thomas Konstandin, Mathias Pierre and Julian Rey.

Would you be interested in presenting a poster? (this will not impact the decision on your talk)

yes

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