

## Scale-dependent galaxy bias in local-type primordial non-Gaussianities with heavy-tailed models

*Friday, 8 November 2024 13:30 (40 minutes)*

Scale-dependent bias is a crucial indicator in the late-time universe for understanding local-type primordial non-Gaussianities. Previous studies have focused on low-order non-Gaussian models characterized by the  $f_{\text{NL}}$  (second order),  $g_{\text{NL}}$  and  $\tau_{\text{NL}}$  (third order) parameters, with forecasts made for upcoming large-scale galaxy surveys. In this talk, we extend this framework to models exhibiting heavy tails in the probability density function of primordial curvature fluctuations. By utilizing cosmological N-body simulations tailored for a specific model of the heavy tail described by a logarithmic transformation, we provide a quantitative analysis of their impact on scale-dependent halo and galaxy bias.

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