## The 7th international conference on particle physics and astrophysics



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## Non-Gaussianities in the bouncing Universe model

Friday, 25 October 2024 18:00 (15)

We acquired and analyzed the primordial bispectrum and the corresponding non-gaussianity in the particular model of the bouncing universe within the framework of the Horndeski theory. The analytical shape function of the bispectrum did not correspond to the widely used local, equilateral of orthogonal shapes. The non-gaussianity parameter is compatible with the current observational bounds even under the restrictions of the regime where the background evolution and perturbations are legitimately described within classical field theory and weakly coupled quantum theory at all times.

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