Inflationary perturbations in Eddington-inspired Born-Infeld gravity

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We briefly introduce the inflation model driven by a massive scalar field in Eddington-inspired Born-Infeld gravity [1] investigated in [2]. We present the recent results of the tensor perturbation in this model investigated in [3]. For short wave-length modes, the perturbation feature is very similar to that of the usual chaotic inflation. For long wave-length modes, the perturbation exhibits a peculiar rise in the power spectrum which may leave a signature in the cosmic microwave background radiation. We also briefly discuss the scalar perturbation in this model.

References