JOINT TUFTS/MIT COSMOLOGY SEMINAR

A theory of Hybrid monodromy inflation with two fields

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In this talk I will revisit the hybrid inflation theory first proposed by A.Linde. In his original paper, A.Linde considers an inflationary model involving two coupled massive scalar fields. This theory fails to predict a spectral index coherent with the Planck data. I will focus on a model that allows for a viable spectral tilt that fits the current data. We will see that we can study this hybrid inflation as an effective field theory showing that its predictions agree with the Planck data. Furthermore, I will explore the quantum stability of this model and outline a possible mechanism realizing the scalars as compact axions dual to massive 4-forms.

Tuesday, March 15, 2022, 2:30 pm

Zoom link will be distributed to joint cosmology seminar mailing list. See https://cosmos.phy.tufts.edu/mailman/listinfo/cosmology-seminar to join.

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