

Four-form relaxation of Higgs mass and cosmological constant

Thursday 5 December 2019 11:30 (30 minutes)

We consider the cosmological relaxation of the Higgs mass and the cosmological constant due to the four-form fluxes in four dimensions. We introduce non-minimal four-form couplings for reheating the Universe after the last membrane nucleation and propose some simple examples with a pseudo-scalar or a complex singlet scalar field. We also discuss the implications of the non-minimal four-form coupling to gravity for flattening the inflaton potential in chaotic inflation models with a pseudo-scalar field.

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Session Classification: Morning session