

Phenomenology 2021 Symposium



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Inflation From The MSSM

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Taking the minimalistic approach, within MSSM, we propose the model of inflation in which the inflaton field is a scalar component of the MSSM state(s).

Two cases will be discussed, which (both) turn out to be very predictive. The inflationary phase is fully governed by the MSSM Yukawa superpotential couplings. The values of the scalar spectral index and the tensor-to-scalar ratio are predicted to be $n_s \approx 0.966$ and $r \approx 0.00118$. The postinflation reheating of the Universe proceeds by the decay of the inflaton with the reheating temperature around 10 thousands TeV.

Some phenomenological implication will be also discussed.

Summary

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