

μ -hybrid inflation with low reheat temperature and observable gravity waves

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In μ -hybrid inflation a nonzero inflaton vacuum expectation value induced by supersymmetry breaking is proportional to the gravitino mass $m_{3/2}$, which can be exploited to resolve the minimal supersymmetric standard model μ problem. We show how this scenario can be successfully implemented with $m_{3/2} \sim 1 - 100$ TeV and reheat temperature as low as 10^6 GeV by employing a minimal renormalizable superpotential coupled with a well defined nonminimal Kähler potential. The tensor-to-scalar ratio r , a canonical measure of primordial gravity waves in most cases is less than or of the order of $10^{-6} - 10^{-3}$.

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