The 4th UniverseNet School - Frontiers of Particle Cosmology



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Mr. TAANILA, Olli (Helsinki Institute of Physics): A TeV-mass Curvaton

Tuesday, 14 September 2010 15:30 (15 minutes)

We consider a curvaton with a mass of 1 TeV and show that the constraints are not consistent with a purely quadratic potential. We then show that the only self-interaction consistent with all the constraints is of the form $V_{int} = sigma^8/M^4$. We also compute the values of non-Gaussianity parameters f_NL and g_NL.

ArXiv number (if any)

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