



High Energy Physics - Theory

# Non-Gaussianity from the hybrid potential

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(Submitted on 24 Jul 2011)

We study the hybrid inflationary potential in a regime where the defect field is light, and more than 60 e-folds of accelerated expansion occur after the symmetry breaking transition. Using analytic and numerical techniques, we then identify parameter values within this regime for which the statistics of the primordial curvature perturbation are significantly non-Gaussian. Focusing on this range of parameters, we provide a specific example which leads to an observationally consistent power spectrum, and a level of non-Gaussianity within current WMAP bounds and in reach of the Planck satellite. An interesting feature of this example is that the initial conditions at horizon crossing appear quite natural.

Comments: 9 pages, 7 figures

Subjects: **High Energy Physics - Theory (hep-th)**; Cosmology and Extragalactic Astrophysics (astro-ph.CO); General Relativity and Quantum Cosmology (gr-qc)

Report number: Imperial/TP/2011/SO/1

Cite as: **arXiv:1107.4739 [hep-th]**

(or **arXiv:1107.4739v1 [hep-th]** for this version)

## Submission history

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[v1] Sun, 24 Jul 2011 09:15:22 GMT (156kb)

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