The handle [http://hdl.handle.net/1887/67091](http://hdl.handle.net/1887/67091) holds various files of this Leiden University dissertation.

**Author:** Welling, Y.M.
**Title:** Spectroscopy of two-field Inflation
**Issue Date:** 2018-11-27
Stellingen

Behorend bij het proefschrift “Spectroscopy of Two-Field Inflation”.

I The Hamilton-Jacobi formalism might also provide a powerful tool to improve our understanding of universality of inflation with a large number of fields (Chapter 2).

II The multi-field inflationary potential does not, generically, reflect the symmetries of perturbations (Chapter 3).

III By simply truncating heavy fields one always overestimates the size of the tensor-to-scalar ratio (Chapter 5).

IV The real benefit of perturbative calculations of large-scale structure for learning about the primordial universe will come when we populate the far side of the moon (Chapter 6).

V The effective field theory of multi-field inflation by Senatore and Zaldarriaga is too restrictive to describe the most interesting dynamics of multi-field inflation.


VI It is remarkable that Seljak’s multi-tracer technology allows us to test single field inflation to arbitrary precision in an idealized cosmological experiment, limited by shotnoise only.


VII The conjectured restrictions on the available field range for inflation could potentially lead to an upper bound on the tensor-to-scalar ratio on inflation embedded in string theory.

D. Klaewer and E. Palti: JHEP, **01**, 088 (2017).

VIII It is equally plausible that dark matter extinguished dinosaurs as that Nemesis did.


IX Propositions, such as the following one, distract attention from the thesis.

X The last proposition of Margot Brouwer’s thesis “The last proposition of Yvette Welling’s thesis will be false.” is true.

Yvette Welling
Leiden, 27-11-2018
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