

Originating the hot Big Bang from the Standard Model Higgs

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Under general circumstances, the Standard Model Higgs is excited in the form of a condensate during or towards the end of inflation. The Higgs condensate is then forced to decay afterwards – due to non-perturbative effects – into the rest of the SM species. I will present the cosmological implications of this primordial decay, quantifying the necessary conditions to achieve a successful mechanism for ‘reheating’ the Universe into the SM. If there is enough time, I will also discuss the implications for primordial gravitational waves.

Summary

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