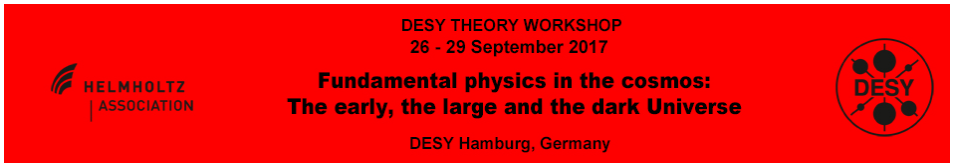


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# Electroweak Vacuum Stability During and After Inflation

*Thursday 28 September 2017 14:51 (17 minutes)*

Currently favoured values of the Standard Model parameters show that the model can be consistently extended all the way up to the Planck scale. The only required new physics at high energies being inflation. However, those values also indicate that at high energies the SM potential might have another, much deeper negative minimum. We show, that apparent negative states do not exclude high energy inflation. The compulsory Higgs-inflaton interactions can stabilise the vacuum. And even if the same interactions tend to destabilise it via the resonant Higgs production after inflation, we show that there is a large parameter space where this can be avoided.

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