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# Higgs Starobinsky inflation

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The idea that inflation may be due to degrees of freedom already present in the standard
model of particle physics or quantum general relativity is extremely attractive and has received much attention in the recent years. In particular two models stand out by their
simplicity and elegance. Higgs inflation with a large non-minimal coupling of the Higgs
boson $H$ to the Ricci scalar ($\xi H^\dagger H R$) and Starobinsky's inflation model based on $R^2$ gravity are both minimalistic and perfectly compatible with the latest Planck data. The aim of this talk is to point out an intriguing distinct possibility, namely that
Starobinsky inflation is generated by quantum effects due to a large non-minimal coupling
of the Higgs boson to the Ricci scalar. In this framework we do not need to posit that the
Higgs boson starts at a high field value in the early universe which would alleviate constraints coming from
the requirement of having a stable Higgs potential even for large Higgs field values.

## Summary

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