

Generality of Higgs inflation

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We consider the problem of generality of inflation for asymptotically flat potential in Einstein frame which corresponds to Higgs potential in Jordan frame of non-minimally coupled scalar field theory. For zero spatial curvature case we show that despite the form of initial conditions good for inflation is rather different from found for power-law potentials, the overall measure of such initial conditions is practically the same as in power-law case. As for the positive spatial curvature case, we have found additional restrictions on the initial conditions zones, good for inflation. In particular, we show numerically, that initial spatial curvature should not exceed some critical value for inflation to happen. Similar results have been found for the potential corresponding to Starobinsky inflation in Jordan frame.