



## The fine-tuning problem revisited in the light of the Taylor-Lagrange renormalization scheme

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We re-analyse the perturbative radiative corrections to the Higgs mass within the Standard Model in the light of the Taylor-Lagrange renormalization scheme. This scheme naturally leads to completely finite corrections, depending on an arbitrary dimensionless scale. This formulation avoids very large individual corrections to the Higgs mass. In other words, it is a confirmation that the so-called fine-tuning problem in the Standard Model is just an artefact of the regularization scheme and should not lead to any physical interpretation in terms of the energy scale at which new physics should show up, nor to the appearance of a new symmetry. We analyse the characteristic physical scales relevant for the description of these radiative corrections.

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