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The Weyl Consistency Conditions and Standard Model Vacuum Stability

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The conformal symmetry plays an important role in quantum field theories, even when it is explicitly broken by a renormalization group flow. The Weyl consistency conditions reflect its presence in the renormalized theory. They provide relations among the beta functions of the theory at different loop orders. As an example, we show how the Weyl consistency conditions affect the computation of the vacuum stability in the Standard Model.

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