

## **(Meta) stability of the electroweak vacuum**

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Since the discovery of the Higgs boson at LHC, experimentalists and theorists have studied its properties in the hope of finding some hints of new physics. Unfortunately the data appear to converge toward Standard Model predictions, therefore it could be reasonable to investigate the behavior of the SM beyond its natural range of energy. We find that the measured Higgs and top masses put the SM in a near-critical situation, where the minimum of the EW vacuum is at the border between the stable and the unstable phases. In order to distinguish between these two states, we made a NNLO calculation of the corrections to the Higgs quartic coupling. I will illustrate the results of our calculations.

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