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Bottom-Tau Unification in Supersymmetric Model with Heavy Sfermions

Tuesday, 12 July 2016 16:35 (20 minutes)

I discuss the Yukawa unification, in particular, the unification of the Yukawa coupling constants of bottom and tau, in the framework of supersymmetric (SUSY) model. I concentrate on the model in which the SUSY breaking scalar masses are of the order of the gravitino mass while the gaugino masses originate from the effect of anomaly mediation and hence are one-loop suppressed relative to the gravitino mass. I show the results of an accurate calculation of the Yukawa coupling constants of bottom and tau at the grand unified theory (GUT) scale, including relevant renormalization group effects and threshold corrections, and discuss its implication to the Yukawa unification in such a framework.

This presentation will be based on arXiv:1604.02156.

Summary

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