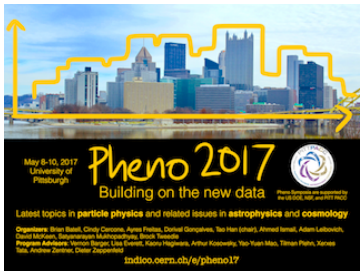

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Covariant diagrams for one-loop matching and SUSY threshold corrections

Tuesday, 9 May 2017 17:30 (15 minutes)

Matching a full theory onto an effective field theory by integrating out heavy fields is often useful for connecting low-energy phenomenology to high-scale physics. I introduce a new formulation of one-loop matching in terms of covariant diagrams, which, unlike conventional Feynman diagrams, preserve gauge covariance in intermediate steps and thus simplify calculations. I will show examples of the use of covariant diagrams in computing SUSY threshold corrections, which helps build connection between unification and phenomenology.

Summary

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