

MSR: The improvement of QCD series with a new renormalization scheme

Friday, 4 February 2011 12:00 (30)

Perturbative QCD results in the $\overline{\text{MS}}$ scheme can be dramatically improved by switching to a scheme that accounts for the dominant power law dependence on the factorization scale in the operator product expansion. We introduce the “MSR scheme” which achieves this in a Lorentz and gauge invariant way. The MSR scheme has a very simple relation to $\overline{\text{MS}}$, and can be easily used to reanalyze $\overline{\text{MS}}$ results. I will show the essential part and latest developments and some phenomenological applications of the new scheme.

Summary

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