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Five-point two-loop master integrals in QCD (15+5min)

Tuesday, 1 September 2015 17:50 (20 minutes)

I present recent progress in the calculation of the master integrals for the five-point amplitude at two loops in QCD, which is a crucial contribution to computation of the the next-to-next-to-leading order cross section for three-jet production at the LHC.
After a brief review of the differenential-equation method for evaluating Feynman integrals,
I will discuss its application to compute the two-loop planar five point Feynman integrals in QCD,
the determination of the boundary values and first physical applications.

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