On the use of the high energy effective action for low x phenomenology

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Summary

We present recent results on the high energy effective action proposed by Lipatov in 1995. After a short introduction we show how the effective action can be used to calculate next-to-leading order (NLO) corrections to cross-sections in the high energy limit. As explicit examples we consider NLO corrections for the forward jet impact factor from the effective action and real NLO corrections to the Mueller-Tang impact factor, where the latter is needed to describe jet events with rapidity gaps. In a second part we discuss applications of the effective action to the description of amplitudes with multiple (reggeized) gluon exchange and discuss its relation to other approaches.

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