Hadron Structure and QCD (HSQCD'2018) Dedicated to the Memory of Lev N. Lipatov (2.05.1940 - 4.09.2017)



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Reggeon integrands in N=4 SYM

Friday 10 August 2018 12:50 (20 minutes)

In this talk we are going to discuss all-loop conjecture for integrands of reggeon amplitudes in N=4 SYM. In particular we will present a new gluing operation in momentum twistor space used to obtain reggeon tree-level amplitudes and loop integrands from corresponding expressions for on-shell amplitudes. The introduced gluing procedure is used to derive BCFW recursions both for tree-level reggeon amplitudes and their loop integrands. In addition we provide predictions for reggeon loop integrands written in the basis of local integrals. As a check of the correctness of gluing operation at loop level we derive the expression for LO BFKL kernel in N=4 SYM.

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