

Non-leptonic B-decays at two-loops in QCD Factorisation

Tuesday, September 10, 2019 3:30 PM (25 minutes)

I will present the calculation of and results for the two-loop penguin amplitudes appearing in non-leptonic B-decays in the framework of QCD Factorisation. I will discuss the details of the computation of this genuine two-loop, two-scale problem, focusing i) on the analytic computation of the master integrals and ii) on the (partially analytic) convolution of the hard kernel with the distribution amplitude of the light final-state meson. I will present phenomenological results, with the two-loop correction included, for branching ratios and direct CP-asymmetries of penguin-dominated non-leptonic B-decays.

Primary author: HUBER, Tobias (University of Siegen)

Presenter: HUBER, Tobias (University of Siegen)

Session Classification: Tuesday Afternoon A