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Semileptonic $b \rightarrow c$ decays with full charm mass dependence at NNLO

Wednesday 28 September 2022 15:00 (15 minutes)

My talk will focus on the calculation of the NNLO contributions to $b \rightarrow c$ decays with full charm mass dependence. For the semileptonic decay channel $b \rightarrow c l \overline{\nu}$, we obtain an analytic result which can be compared to previous known results obtained via expansions in the mass ratio m_c/m_b . I will also give an outlook on the calculation of the hadronic decay channels $b \rightarrow c \overline{u} d$ and $b \rightarrow c \overline{c} s$, where similar calculation techniques as in the semileptonic case will be used.

Summary

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Presenter: EGNER, Manuel

Session Classification: Parallel Session Wednesday

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