

Development of a parametrization of the form factors for the $L_b \rightarrow L_c^*$ transition, and a study of LHCb's sensitivity to these parameters in view of a future $R(L_c^*)$ measurement

Abstract :

We present a theoretical study of tau/mu universality in semileptonic $L_b \rightarrow L_c^$ decays. After having performed the analytical calculation of the form factors using the techniques of HQET, we show the potential sensitivity for these form factors parameters at LHCb. We then show how these measurements can impact the theoretical uncertainty on $R(L_c^*)$.*

P. Boer, M. Bordone, E. Graverini, G. Isidori, P. Owen, N. Serra and D. van Dyk.