Improving the extraction of the semileptonic form factors from LQCD

Presenter: Benjamin Haas — Laboratoire de Physique Theorique
B.Haas, F.Mescia, D.Becirevic

We propose three strategies to improve the accuracy of the calculation of the hadronic matrix elements relevant to the semileptonic $K$, $D$, $B$-decays. Illustration is provided for the $D$-decays form factors $F_+(q^2)$ and $F_0(q^2)$, extracted from the correlation functions computed with twisted boundary conditions on the configurations produced with $N_f = 2 \mathcal{O}(a)$-improved Wilson quark.