Partikeldagarna 2024



Contribution ID: 49 Type: not specified

Leptonic decays of pions and kaons in lattice QCD+QED

Monday, 21 October 2024 09:30 (15 minutes)

Precision calculations within the Standard Model offer the possibility to indirectly search for the existence of new physics. In the flavour physics sector there are emerging tensions that must be further scrutinised, e.g. for determinations of the light-quark Cabibbo-Kobayashi-Maskawa matrix elements through various hadron decays. These decays require good control of the non-perturbative low-energy dynamics of QCD, where methods such as lattice and effective field theory are essential. In this talk I will present recent results for precision determinations of leptonic decays of pions and kaons including also effects from QED, current bottlenecks and possible solutions.

Summary

Primary author: Dr HERMANSSON-TRUEDSSON, Nils (University of Edinburgh)

Presenter: Dr HERMANSSON-TRUEDSSON, Nils (University of Edinburgh)

Session Classification: Session 01