

Loop Effects solutions to B anomalies

Tuesday, 16 April 2019 15:30 (25 minutes)

In this talk I will show how one can account for the observed anomalies in $b \rightarrow s\mu^+\mu^-$ via loop effects with new scalars and fermions. Allowing for couplings to left- and right-handed quarks and leptons, we calculate the contributions to $b \rightarrow s\mu^+\mu^-$, $B - \bar{B}$ mixing and the anomalous magnetic moment of the muon.

I will show how, in a specific model in which we supplement the SM with a 4th generation of vector-like fermions and a real scalar field, one can address at the same time the observed anomalies in $b \rightarrow s\mu^+\mu^-$ and the anomalous magnetic moment of the muon.

Primary authors: FEDELE, Marco (ICC Barcelona); MESCIA, Federico; CRIVELLIN, Andreas (Paul Scherrer Institut (CH)); ARNAN, Pere (Universitat de Barcelona)

Presenter: FEDELE, Marco (ICC Barcelona)

Session Classification: Flavor

Track Classification: Flavor