



Contribution ID: 14

Type: **not specified**

Flavour anomalies, leptoquarks, renormalisation group fixed-points, and collider physics

Friday 21 June 2024 15:00 (40 minutes)

Leptoquark (LQ) interactions can explain the deviations between $b \rightarrow c\tau\bar{\nu}$ and $b \rightarrow s\ell^+\ell^-$ data and Standard-Model predictions. These particles are motivated by theories with quark-lepton unification which must occur at a much higher scale $M_{\{QLU\}}$ than the masses of the leptoquark invoked to explain the flavour anomalies. The presence of such a mass gap offers the opportunity to study LQ properties from renormalisation group effects. I present infrared fixed-point solutions for leptoquark couplings and discuss their implications for flavour anomalies and collider searches. Then I present new results on radiative corrections which render the LQ couplings probed at low and high energy different.

Primary author: NIERSTE, Ulrich (KIT)

Presenter: NIERSTE, Ulrich (KIT)

Session Classification: Day 4