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Approaching the lepton flavour universality violation in B meson decays using a leptoquark model

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Recent measurements on semi-leptonic decays of the B meson suggest a violation of lepton universality. This goes against the Standard Model prediction where none of its interactions distinguish lepton flavours. A posible explanation for this anomaly lies in the context of Beyond Standard Models. In this talk a model with new physics will be presented, which makes use of leptoquarks - hypothetical particles mediating interactions between quarks and leptons - and it will be shown how it can account for lepton violation in semi-leptonic decays.

Author: GOMEZ CRUZ, Nicolas

Co-authors: CASTILLO RAMIREZ, Andrés Fernando (Universidad Nacional de Colombia); MILANES CARRENO, Diego (Universidad Nacional de Colombia (CO))

Presenter: GOMEZ CRUZ, Nicolas

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