The 28th International Workshop on Weak Interactions and Neutrinos (WIN2021)

Contribution ID: **187** Type: **Poster session**

Analysis of B –> K_1 ll process in the scalar leptoquark model

We investigate the effect of scalar leptoquark on the rare semileptonic $B \to K_1 ll$ decay mode. We constrain the leptoquark coupling by using the updated experimental limits on the branching ratios of $b \to sll$ processe and the lepton nonuniversality $R_{K^{(*)}}$ parameters. Using the constrained new parameters, we estiamte the branching ratios, forward-backward asymmetry, lepton non-universality parameters of $B \to K_1 ll$ channel.

Primary author: Dr SAHOO, Suchismitha (Central University of Karnataka)

Co-author: T A, Yashashwini (Central University of Karnataka)

Presenter: T A, Yashashwini (Central University of Karnataka)

Session Classification: Flavor and Precision Physics Session 2

Track Classification: Flavor and Precision Physics