

## Searches for new physics in the final state

$$B - \tau_h - p_T^{miss}$$

*Tuesday 7 June 2022 16:45 (15 minutes)*

The  $R_{D^{(*)}}$  anomaly represents a tension with the lepton flavor universality. With recent data, the anomaly has a statistical significance greater than  $3\sigma$  between BaBar, LHCb and Belle observatons. Many theoretical models were proposed to solve such difference between the theory and experiments. In the work we have done, we explore the phenomenology of 3 different models that could explain the  $R_{D^{(*)}}$  anomaly and would manifest as the final state  $B-\tau_h-p_T^{miss}$  in pp colissions in the LHC and the CMS experiment.

**Authors:** FLOREZ BUSTOS, Carlos Andres (Universidad de los Andes (CO)); RUIZ, Jose (Universidad de Antioquia (CO)); ATEHORTUA GARCES, Tomas (Universidad de Antioquia (CO))

**Presenter:** ATEHORTUA GARCES, Tomas (Universidad de Antioquia (CO))

**Session Classification:** Parallel