

## Flavored mono-tau searches at the LHC

*Tuesday, 16 April 2019 12:10 (25 minutes)*

I will discuss the crossing-symmetry relation between  $b \rightarrow c \tau \nu^-$  decay and  $bc^- \rightarrow \tau \nu^-$  scattering. At low energies, this allows one to correlate New Physics contributions to the semitauonic B decays to the  $B(c)$  lifetime. At high energies, one derives direct correlations to the mono-tau signature at the LHC ( $pp \rightarrow \tau hX + \text{MET}$ ). I will discuss the impact of these considerations in New Physics explanations addressing the  $R(D^*)$  anomalies and, more in general, the potential of the LHC to provide relevant inputs for Flavor Physics.

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