



ID de Contribution: 2

Type: **Ordinary**

$b \rightarrow s$ $l+l$ anomalies: NP & uncertainties

mercredi 22 mars 2017 09:05 (15 minutes)

Assuming Nature violates universality of lepton flavour interactions we explore different observables using the channel $B \rightarrow K^* \mu \mu$ that can provide specific information on the way this violation is implemented. Three different categories of observables are discussed: Q_i observables (recently measured by Belle), B_i observables and M observables. We make particular emphasis on the capacity to distinguish different New Physics scenarios and on the lack of uncertainties. We discuss new ideas on these observables developed in collaboration with Belle and LHCb experimentalists.

Summary

Universal Lepton Flavour Violating observables based on angular distributions like $B \rightarrow K^* \mu \mu$ provide a new handle to explore New Physics. We will discuss the properties of different observables of this type: Q_i , B_i and M observables. We will show that Q_i observables (difference of P_i observables between the muonic and the electronic channel) are a robust tool both experimentally and theoretically to disentangle the precise scenario of New Physics that $b \rightarrow sll$ anomalies are pointing to.

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Classification de Session: Heavy Flavours

Classification de thématique: Theory