



Contribution ID: 255

Type: **Oral presentation**

## Theory overview of $B_{s,d} \rightarrow \mu^+ \mu^-$ decays

*Wednesday 30 April 2014 14:00 (24 minutes)*

I will give a theoretical overview of the rare decays  $B_{s,d} \rightarrow \mu^+ \mu^-$ , which have long been promising probes of New Physics.

Notably there has been important progress in predicting the branching ratios for these decays in the Standard Model, which I will present.

This progress is timely in light of recent experimental measurements of these branching ratios, and I will discuss the implications of these measurements for New Physics.

Furthermore, I will highlight the utility of the time-dependent observables of these decays, particularly the effective lifetime of  $B_s \rightarrow \mu^+ \mu^-$ , which complement the branching ratio observable in the search for New Physics.

**Primary author:** KNEGJENS, Rob (T)

**Presenter:** KNEGJENS, Rob (T)

**Session Classification:** WG5: Heavy Flavours

**Track Classification:** WG5: Heavy Flavours