## DIS 2014 - XXII. International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 255 Type: Oral presentation

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

Wednesday 30 April 2014 14:00 (24 minutes)

I will give a theoretical overview of the rare decays  $B_{s,d} \to \mu^+ \mu^-$ , 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  $B_s \to \mu^+ \mu^-$ , 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