



ID de Contribution: 21

Type: **Ordinary**

K to pi nu nu in the SM and beyond

vendredi 20 mars 2015 19:25 (15 minutes)

The precision expected for the rare $K \rightarrow \pi\nu\bar{\nu}$ decays by the NA62 and KOTO experiments in the coming decade will rival their current Standard Model (SM) predictions.

In preparation for this upcoming opportunity, I will review the SM predictions and discuss the sensitivity of these decays to models beyond the SM.

Of particular interest will be how models with constrained quark flavour symmetries could be discriminated using correlations between these and other rare decay processes.

I will also discuss the smallest distance scales reachable in the LHC era from rare decays using as a benchmark a Z' model, which for the kaon decays we find to be in the order of zeptometers i.e. they probe the “zeptouniverse”.

Auteur principal: KNEGJENS, Robert (TUM - IAS)

Orateur: KNEGJENS, Robert (TUM - IAS)

Classification de Session: Heavy Flavours

Classification de thématique: Theory