Université Paris-Saclay IJCLab (Laboratoire de Physique des 2 Infinis Irène Joliot-Curie) Bât. 100, F-91405 Orsay

## Séminaire de Physique Nucléaire Théorique

## Flavour physics analyses: from Standard Model to New Physics.

## S. Descotes-Genon

(LPT Orsay)

The study of quark flavour dynamics allows one to probe the Standard Model of particle physics as well as to constrain New Physics through a large variety of processes. Due to the interplay of several fundamental interactions with very different typical scales, it proves very useful to rely on effective field theories to separate the various dynamics at play. I will illustrate this potential with two examples: one one hand, (some aspects of) the determination of the Cabbibo-Kobayaski-Maskawa matrix describing mixing and CP violation in the quark sector, and on the other hand, the interpretation of the deviations currently observed in rare b-quark decays in terms of New Physics.

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