# Séminaire de Probabilités et Statistique

## Mardi 28 juin à 14h00
Salle de réunion Fizeau

# Benjamin Bobbia
ESILV

## *A Donsker's theorem for data driven local empirical measures*

**Abstract:** Nowadays, empirical processes are well known objects. A reason that push forward theirs studies is that, in many models, we can write the estimators as images of empirical measures. In this work we investigate the case of local empirical measures built over a sub-sample with data conditioned to be in a certain area. There exists numerous results about such question, but what can we say if the area of interest is data driven ? In the present work we present a general framework which allows to derive asymptotic results for this particular empirical measures (with "low" cost in terms of technicality and assumptions). In this talk, this approach is specified for the framework of extreme values theory. In which we presente how tail and quantile estimation can be derived from a such methodology.

*Joint work with Clément Dombry and Davit Varron.*