Séminaire de Probabilités et Statistiques

Mardi 07 novembre à 14h00

Laboratoire Dieudonné Salle de Conférences

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Consistent change-point detection with kernels

In this talk I will present the kernel change-point algorithm (KCP) proposed by Arlot, Celisse and Harchaoui (2012), that aims at locating an unknown number of change-points in the distribution of a sequence of independent data taking values in an arbitrary set. The change-points are selected by model selection with a penalized kernel empirical criterion. We provide a non-asymptotic results showing that, with high probability, KCP retrieves the correct number of change-points, provided that the constant in the penalty is well-chosen; in addition, KCP estimates the change-points location at the minimax rate.