Séminaire de Probabilités et Statistiques

Mardi 08 novembre à 14h00
Laboratoire Dieudonné
Salle de réunion, 5e étage bâtiment Fizeau

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Totally ordered, measured trees, reduced trees and other ultrametric spaces

The idea of the talk is :
— to define real trees called TOM-trees (totally ordered measured trees), with certain conditions on the order and the measure
— to define in a natural way the contour process of (the truncations of locally) compact TOM-trees
— to show that this process is cadlag with no negative jumps
— to show that a sphere of a TOM-tree (points at the same distance a from the root) which has no isolated point admits a local time consistent with the order
— to represent this sphere thanks to a point process (the depths of the excursions away from a of the local time) called comb metric space
— to show that all ultrametric spaces with no isolated point are actually comb metric spaces
— to show that for some binary random trees called splitting trees with infinite variation, the point process is a Poisson point process