



STATISTICS SEMINAR
organized jointly with IAP-network

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*"Estimation of parameters of regularly varying tail
distributions on convex cones"*

February 12, 2010
16:00
Room : c 115 (STAT)

Abstract

The stable laws are the only possible non-trivial limit of normalized sum of i.i.d. random variables. The property of regular variation is closely linked with the characterization of domains of attraction of stable laws. These concepts make sense in any convex cone, i.e. in a semigroup equipped with multiplication by numbers. This talk starts with the presentation of basic definition and properties concerning the regularly varying tail distributions on convex cones. Some examples of simulation of the stable random vectors using the LePage representation are shown. An estimation method of parameters of the regularly varying tail distributions in general cones is introduced; the properties of estimators are investigated. Finally, we provide an application of this algorithm on data representing planetary perturbations in Oort cloud comets.

You are welcome to the coffee break before the seminar (room : c 105)

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