
STATISTICAL INFERENCE FOR A PARTIALLY OBSERVED INTERACTING SYSTEM OF HAWKES PROCESSES

Chenguang Liu^{*1}

¹LIU – Chine

Résumé

We observe the actions of a K sub-sample of N individuals until time t for some large K smaller than N .

We do not know if the individuals i and j are connected or not. We model their relationships by i.i.d. Bernoulli(p)-random variables, where p in $(0,1]$ is an unknown parameter. Each individual acts autonomously at some unknown rate $\mu > 0$ and acts by mimetism at some rate proportional to the sum of some function ϕ of the age

^{*}Intervenant