

**Detecting instants of jumps and estimating intensity of jumps  
from continuous or discrete data**

Denis Bosq (UPMC-Paris 6, Paris, France)

(joint work with Delphine Blanke (UAPV, Avignon, France))

**Abstract**

The space  $D = D[0, 1]$ , equipped with the Skorohod metric, is natural for studying fixed or random jumps.

In this context, we study the ARMAD process and show that, under suitable assumptions, the jumps are independent.

Thus, it is possible to estimate intensity of jumps from continuous or discrete data. Various situations are considered:

- fixed instants,
- pseudo-Poisson process,
- independent instants.

In the last case, one may use Viète's formula for solving a polynomial equation, at least by approximation.

Limit in distribution and exponential rates of convergence are considered.

Finally, we indicate why applications to the 'mistral' are possible.