

Optimal Control for Levi Processes

Fully non linear equations arise in geometry, optimal control and game theory, when one is able to "design" a media to maximize diffusion or to evaluate a worst case scenario under uncertainty.

In the last thirty years a rather general theory has been developed in understanding the behavior of its solutions.

In more recent times, motivated by several developments, some in geometry, others in game theory and financial math, a group of us has been involved in the case of non local (jump) processes.

I will describe recent developments.