PROBABILISTIC NUMERICAL METHODS

ETIENNE TANRÉ

Probabilistic numerical methods are widely used in machine learning algorithms as well as in mathematical finance for pricing financial derivatives and computing strategies. The course will present the basic methods used for simulating random variables and implementing the Monte-Carlo methods. Simulation in Scilab of stochastic processes used in mathematical finance, such as Brownian motion and solutions to stochastic differential equations, will be discussed as well.