

NUMERICAL METHODS FOR PDES

R. MASSON

This course will focus on the use of parabolic PDEs in mathematical finance. A first part of the lectures will consist of a reformulation of the Black Scholes model and of the option pricing problem in terms of PDE methods. Then, advanced numerical methods, based on finite volume methods, will be discussed.

Prerequisites: Differential calculus in finite dimension,
Basic elements of functional analysis.
Second trimester.