

Numerical solutions of optimal stopping and control problems

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Abstract

In the first part of the talk the problem of optimal stopping and stochastic control of diffusion processes and the related fully nonlinear PDEs, the Bellman equations, will be introduced.

The second part of the talk will be on finite difference approximations of the Bellman equations. In particular, the breakthrough results of Krylov on the rate of convergence of finite difference approximations and some recent developments of these results will be discussed.