On the convergence of discrete optimal controls

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In this talk we survey some classical and new results regarding the discretization of stochastic optimal control problems. We focus our attention on time-discrete approximations recalling first some classical convergence result for the value function which can be proved by using analytic or probabilistic arguments. Next we discuss the more delicate issue of the convergence of the optimizers as well as an algorithm for the time-discrete problem.

Références

[1] J.-F. Bonnans, J. Gianatti and F.-J. Silva, *On the time discretization of stochastic optimal control problems: the dynamic programming approach*, Preprint, 2017.

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