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Optimal control of stochastic differential equations and optimality conditions

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Abstract

In this talk, optimal control problems of the stochastic differential equations is considered. Firstly, we formalize the problem. We introduce the model problem. Then, in order to solve the optimization problem we obtain the optimality conditions. An efficient gradient method is used to obtain the optimality system. As a numerical example, a financial mathematical model is considered.

Key Words: Optimal control, Stochastic differential equation.

References

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