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论文

FORWARD-BACKWARD STOCHASTIC DIFFERENTIAL EQUATIONS, LINEAR QUADRATIC STOCHASTIC OPTIMAL CONTROL AND NONZERO SUM DIFFERENTIAL GAMES

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摘要 In this paper, we use the solutions of forward-backward stochastic differential equations to get the explicit form of the optimal control for linear quadratic stochastic optimal control problem and the open-loop Nash equilibrium point for nonzero sum differential games problem. We also discuss the solvability of the generalized Riccati equation system and give the linear feedback regulator for the optimal control problem using the solution of this kind of Riccati equation system.

关键词 Stochastic differential equations, stoch

分类号

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Key words Stochastic differential equations stochastic optimal control Riccati equation nonzero sum stochas

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