INFINITE HORIZON REFLECTED BACKWARD STOCHASTIC DIFFERENTIAL EQUATIONS AND APPLICATIONS IN MIXED CONTROL AND GAME PROBLEMS

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Abstract: We prove existence and uniqueness results of the solution for infinite horizon reflected backward stochastic differential equations with one or two barriers. We also apply these results to get the existence of optimal control strategy for the mixed control problem and a saddle-point strategy for the mixed game problem when, in both situations, the horizon is infinite.

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