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AN APPLICATIONS OF SCHAUDER'S FIXED POINT THEOREM TO BACKWARD STOCHASTIC DIFFERENTIAL EQUATIONS

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Abstract. In general, all results on the existence of solution of the stochastic differential equations are based on the convergence of some approximating sequence by a kind of Picard iteration. The our goal, is to prove existence of solutions of a backward stochastic differential equation with some general assumptions on coefficients functions using the Schauder's fixed point theorem, generalizing some results for the (forward) stochastic differential equations.
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