

OPTIMAL SUPERSOLUTIONS OF BSDEs UNDER CONSTRAINTS

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We prove existence of optimal supersolutions for a class of backward stochastic differential equations (BSDEs), the control processes of which are of the form $dZ = \Delta dt + \Gamma dW$ and the generator may depend on (Δ, Γ) . As an application we discuss the hedging problem under Gamma constraints in a financial market.

The talk is based on a joint work with Gregor Heyne and Christoph Mainberger.