
Numerical approximation of switching problems

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Abstract

We use the representation of Switching Problems as obliquely reflected BSDEs to obtain a discrete time approximation scheme of the solution. We thus focus on the discretization of the obliquely reflected BSDEs. By proving a stability result for the Euler scheme associated to the BSDE, we are able to obtain a rate of convergence in the Lipschitz setting and under the same structural conditions on the generator as the one required for the existence and uniqueness of a solution to the obliquely reflected BSDE. This is a joint work with Jean-François Chassagneux.

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