An existence result in the control of forward backward stochastic differential equations

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Abstract: We prove the existence of optimal relaxed controls as well as strict optimal controls for systems governed by non linear forward-backward stochastic differential equations (FBSDEs). Our approach is based on weak convergence techniques for the associated FBSDEs in the Jakubowski S-topology and a suitable Skorokhod representation theorem.

Link : http://pinguim.uma.pt/Investigacao/Ccm/icsaa11/page7/page7.html