MEAN-FIELD BACKWARD STOCHASTIC DIFFERENTIAL EQUATIONS WITH SUBDIFFERRENTIAL OPERATOR AND ITS APPLICATIONS

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Abstract: In this talk, I will introduce a class of mean-field backward stochastic differential equations with subdifferrential operator corresponding to a lower semi-continuous convex function. By means of Yosida approximation, the existence and uniqueness of the solution is established. As an application, the probability interpretation for the viscosity solutions of a class of nonlocal parabolic variational inequalities is given. Some well-known results are extended.