August 31st, 2020
Zoom Meeting
2:00 P.M. - 3:00 P.M.

Prof. Kihum Nam
(Monash University, Australia)

Novel Global Well-posedness for Non-Markovian Multidimensional Superquadratic BSDE.

Abstract: Under the assumption on the regularity with respect to the underlying noise, we prove the global existence and uniqueness of strong solution of multidimensional superquadratic backward stochastic differential equations (BSDEs) without Markovian assumption. The key technique is the interplay between the local well-posedness of fully coupled path-dependent forward backward stochastic differential equations (FBSDEs) and backward iterations of the superquadratic BSDE, via Girsanov transform. These BSDE result also provides well-posedness of some superquadratic FBSDEs.