December 2nd, 2019 KAP 414 2:00 P.M. – 3:00 P.M.

Professor Ludovic Tangpi

(Princeton University)

"On Backward Propagation of Chaos"

Abstract: In this talk we will present an extension of the theory of propagation of chaos to backward (weakly) interacting diffusions. The focus will be on cases allowing for explicit convergence rates and concentration inequalities for the empirical measures. Among other consequences, we derive the approximation of some non-local, second order PDEs on an infinite dimensional space by a sequence of parabolic PDEs on finite dimensional spaces.

The talk is based on join works with D. Bartl and M. Lauriere.