

M. Arnaudon: Coupling of Brownian motions with set valued dual processes on Riemannian manifolds

jeudi 27 octobre 2022 14:30 (1 heure)

In this talk we will motivate and explain the evolution by renormalized stochastic mean curvature flow, of boundaries of relatively compact connected domains in a Riemannian manifolds. We will construct coupled Brownian motions inside the moving domains, satisfying a Markov intertwining relation. We will prove that the Brownian motions perform perfect simulation of uniform law, when the domain reaches the whole manifold. We will investigate the example of evolution of discs in spheres, and of symmetric domains in the Euclidean plane. Skeletons of moving domains will play a major role.