Séminaire de Probabilités et Statistique

Mardi 20 Octobre à 14h00

Laboratoire Dieudonné Salle de conférence - LJAD

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The Support of McKean-Vlasov equations and Rough Quantization

We present recent results on two problems. The first is the construction of a quantization for gaussian rough paths. We focus entirely on Brownian motion but other signals can be considered. We demonstrate key properties and prove a collection of equivalent rates of convergence. Secondly, these codebooks are used to approximate the law of McKean-Vlasov equations driven by the gaussian rough path via systems of interacting ODEs. This allows us to represent the support of the law of a McKean-Vlasov equation in path space without needing to know the law of the solution explicitly.