

学术报告

报告人：刘伟教授 (武汉大学)

报告题目：Some recent results on mean field interacting particle systems and McKean-Vlasov equations

报告时间：2023年3月27日, 15:00-16:30

报告地点：腾讯会议 945 598 826

发布平台：中国人民大学

报告摘要：In this talk, we will present our recent studies about the long time behaviors about the mean-field interacting particle systems and the McKean-Vlasov equation. We will show the gradient estimate of the Poisson equation, the exponential convergence in the Wasserstein metric and uniform in time propagation of chaos for the mean-field particle system related to McKean-Vlasov equation. This part is based on the coupling method. On the other hand we will show some explicit and sharp estimates of the spectral gap and the log-Sobolev constant for mean-field particles system, uniform in the number of particles, from which we derive the exponential convergence of McKean-Vlasov equation in the sense of entropy.

报告人简介：刘伟，武汉大学数学与统计学院教授，博士生导师。2009年博士毕业留校任教。目前主要从事随机分析，随机算法，最优传输和机器学习方面的研究，主持国家自科面上项目，参与国家自科重点项目，在CMP、JMPA、AOAP、SPA、AIHP等一流学术期刊发表多篇学术论文。