## 概率论系列报告 Probability Seminar

报告题目(Title): Hamilton-Jacobi equations for inference

## of matrix tensor products

报告人(Speaker): 陈鸿宾 Hong-Bin Chen (NYU)

时间(Time): 2020/10/12 14:00-15:00

地点(Venue): 理科一号楼 1114 Science Building No.1

摘要(Abstract):

We consider the high-dimensional limit of the free energy associated with the inference problem of finite-rank matrix tensor products. Following the recent approach by J.-C. Mourrat, we compare the limit with the solution to a certain Hamilton-Jacobi equation. In general, we obtain an upper bound for the limit. Under an additional assumption on the nonlinearity in the equation which is determined explicitly by the model, we identify the limit with the solution. Two notions of solutions, weak solutions and viscosity solutions, are considered. This is a joint work with Jiaming Xia.

## 欢迎参加

## Everyone is welcome.