

## 偏微分方程及其应用中心

- 報告題員: Speeding up Langevin Dynamics by Mixing
- 報告人: 冯媛媛 副教授(华东师范大学)
- **衬** 问: 2024年01月17日(星期三)10:00-11:00

## **地** 点:数学院南楼 620

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In this talk, we would study how stirring would help dissipate the energy and the applications, especially the application to the Langevin dynamics. We would first introduce the dissipation enhancing flows and study the dissipation time of such flows, where the dissipation time is explicitly computed based on the mixing rate. We then use mixing velocity field as a drift added to the Langevin dynamics (without changing the stationary distribution) and obtain quantitative estimates on the convergence rate of the system. We show that an exponentially mixing drift can be rescaled to make the mixing time of the Langevin system arbitrarily small.