



复旦大学数学科学学院 数学综合报告会

报告题目: Self-fictitious play for Mean Field Games

报告人: 任振杰 教授(巴黎萨克雷大学)

时间: 2025-08-22 星期五 10:00-11:00

地点: 光华楼东主楼1601

报告摘要:

In this talk, we present a new mechanism for approximating Nash equilibria in ergodic mean field games, under the assumptions that the game is both potential and monotone. Drawing inspiration from fictitious play in MFGs and self-interacting dynamics used to approximate the long-time behavior of McKean – Vlasov equations, we introduce a novel algorithm, which we call self-fictitious play. We will outline how coupling methods and the Lions – Lasry divergence can be employed to establish the convergence of this algorithm.

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