时间：2022.11.24. 15:00-16:00 am (Beijing time).

腾讯会议：832-3835-0005

报告人：牟宸辰 (City U of Hong Kong)

题目：Propagation of Monotonicity for Mean Field Games

摘要：It is well known in the mean field game literature that certain monotonicity condition is crucial for the uniqueness of mean field equilibria and for the wellposedness of the associated master equation. One interesting observation is that the propagation of the monotonicity (either in Lasry-Lions sense or in displacement sense) of the value function plays the key role here. We shall introduce a method to find conditions on the coefficients which ensure that any solution of the master equation will maintain the monotonicity property. This method also allows us to consider anti-monotonicity and obtain the desired wellposedness provided the coefficients are sufficient anti-monotone in appropriate sense. We finally extend our results to mean field game of controls. This talk is based on a joint work with Gangbo-Meszaros-Zhang and two joint works with Zhang.