北京理工大學

数学与统计学院学术报告

Invariance of Observability for Linear Backward Stochastic Evolution Equations

报告人： 于怀强

时 间： 2026年11月26日（星期四） 15:00--16:00

地 点： 文萃楼E708

摘 要： This talk focuses on the invariance of observability for linear backward stochastic evolution systems with respect to both the underlying probability space and time shifts of the observation interval. These results show that, despite the stochastic nature of the systems, their observability -- and, by duality, the null controllability of the associated control systems -- is determined by the deterministic operator coefficients and the length of the observation interval. In other words, the observability of these systems -- and, correspondingly, the controllability of their dual systems -- is a deterministic question. Some applications will also be presented.

个人简介：于怀强，天津大学数学学院副教授，主要从事分布参数系统控制理论研究，关注无穷维系统的能控性、能观性与反馈镇定问题。近年来，重点研究具有无界控制算子的无穷维线性系统的反馈能稳性，探索反馈构造、闭环系统适定性与稳定性之间的内在联系。目前，研究兴趣主要集中于无穷维随机控制系统的长时间行为与精确耦合理论，进一步探究统计力学、随机控制理论与确定性控制理论之间的联系。主要研究成果发表在J. Math. Pures Appl.，SIAM J. Control Optim.，J. Differential Equations等期刊上。