



复旦大学数学科学学院 数学综合报告会

报告题目: **Stability analysis for inverse transport problems**

报告人: Professor Manabu Machida

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报告时间: 2017-03-24 星期五 09:00-10:00

报告地点: 光华东主楼 1501

摘要: We consider inverse problems of recovering coefficients in the radiative transport equation or the linear Boltzmann equation from boundary measurements. We show the global Lipschitz stability. Then we consider the half-order time-fractional radiative transport equation in which the time derivative is replaced by the Caputo derivative. We prove the global Lipschitz stability for this case of anomalous transport. In both cases, the proofs are based on Carleman estimates. The first part is a joint work with Masahiro Yamamoto (U. of Tokyo) and the second part is a joint work with Atsushi Kawamoto (U. of Tokyo).

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