


复旦大学数学科学学院
数学综合报告会

报告题目：Monge's mass transport problem

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摘要：The optimal transportation problem can be formulated as a Monge-Ampere type equation, and the existence and regularity of optimal mappings have been established under certain conditions. Monge's original problem is one of the most interesting cases and is at the borderline of these conditions. With my collaborators Qi-Rui Li and Filippo Santambrogio, we recently studied the regularity of Monge's problem and observed some delicate results. We proved that in a smooth approximation, the eigenvalues of the Jacobian matrix of the optimal mapping are uniformly bounded but the mapping itself may not be Lipschitz continuous. But in dimension two the mapping is continuous. In this talk I will discuss recent development in this direction.

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