







复旦大学数学科学学院

数学综合报告会

报告题目: Exact boundary controllability of nodal profile for entropy solutions to hyperbolic systems of conservation laws

报告人: 余磊 助理教授 (同济大学)

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报告摘要:

It has been recently studied the exact boundary controllability of the nodal profile for classical solutions to quasilinear hyperbolic systems of conservation laws; while, as far as I know, there were no corresponding results in the framework of entropy solutions. In this talk, I will first briefly summarize our previous results on the exact boundary controllability for entropy solutions to strictly hyperbolic systems of conservation laws. Then, I will introduce our recent work which concerns the corresponding results on the exact boundary controllability of nodal profile. Our proof is based on the well-posdedness of semi-global solutions as the limits of front tracking approximate solutions to the mixed initial-boundary value problem with nonlinear boundary conditions. (This is a joint work with Prof. Tatsien 非线性数学模型与方法教育部重点实验室

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