Minimal control time for one-dimensional first-order hyperbolic systems

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Abstract

The goal of this talk is to present some recent results in [2] concerning the exact controllability of one-dimensional first-order linear hyperbolic systems when all the controls are acting on the same side of the boundary. We show that the minimal time needed to control the system is given by an explicit and easy-to-compute formula with respect to all the coupling parameters of the system. The proof relies on the introduction of a canonical UL-decomposition and the compactness-uniqueness method. This is a joint work with Long Hu.

References

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