

Hierarchic control of a linear heat equation with missing data

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Abstract

The paper is devoted to the Stackelberg control of a linear parabolic equation with missing initial conditions. The strategy involves two controls called follower and leader. The objective of the follower is to bring the state to a desired state while the leader has to bring the system to rest at the final time. The results are obtained by means of Fenchel-Legendre transform and appropriate Carleman inequalities.

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