

STACKELBERG-NASH STRATEGY FOR THE NULL CONTROLLABILITY OF SEMILINEAR
DEGENERATE EQUATIONS IN NON-CYLINDRICAL DOMAINS

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In this paper we use a Stackelberg-Nash strategy to show the local null controllability of a semilinear parabolic equation in one-dimension defined in a non-cylindrical domain where the diffusion coefficient degenerates at one point of the boundary. The linearized degenerated system is treated using a Carleman inequality for degenerated non-autonomous systems proved by the authors in [1] and the local controllability of the semi-linear system is obtained using Liusternik's inverse function theorem.

Trabajo en conjunto con Juan Limaco (Universidade Federal Fluminense) y Luis P. Yapu (Friedrich-Alexander Universitat Erlangen-Nurnberg).

Referencias

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