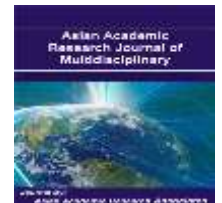




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## CONTROLLABILITY OF A QUASI-LINEAR HEAT EQUATION

MULAMBULA ANDANJE<sup>1</sup>; JOHN WANYONYI MATUYA<sup>2</sup>

<sup>1</sup>Masinde Muliro University of Science and Technology, P.o Box 190-50100, Kakamega  
(Kenya)

<sup>2</sup>Maasai Mara University, P.o Box 861-20500, Narok (Kenya)

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### Abstract

In this article we have examined the controllability of the quasi-linear heat equation. We considered distributed controls with support in a small sub-domain. We assumed that the quasi-linear terms are locally Lipschitz. We have proved that there exists a control that drives to desired state within a finite time. Our main objective was to determine the existence, uniqueness and regularity of solutions of controllability of a quasi-linear heat equation.

**Key words:** Controllability, Lipschitz, quasi-linear, Hilbert space

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