

ERRATUM to: ON THE BANG-BANG PRINCIPLE FOR PARABOLIC OPTIMAL CONTROL PROBLEMS

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Abstract

This is the correction of a confusing typo on page 287 of [1].

Key words: optimal control, heat equation, bang-bang principle

MSC subject classification: 49K20, 49K30, 49M05

1 Introduction

On page 287 of [1], the second to last formula

$$y(x, t) = 1 + 2 \sum_{n=1}^{\infty} (-1)^n \cos(n\pi x) \int_0^t e^{-n^2\pi^2(t-s)} u(s) ds$$

contains a typo that is confusing but does not have any influence on the remainder of the paper. The correct version is

$$y(x, t) = \int_0^t u(s) ds + 2 \sum_{n=1}^{\infty} (-1)^n \cos(n\pi x) \int_0^t e^{-n^2\pi^2(t-s)} u(s) ds.$$

References

- [1] F. Tröltzsch. *Ann. Acad. Rom. Sci., Ser. Math. Appl.* 15:286-307, 2023.

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