ON THE SOLUTION OF CONFORMABLE FRACTIONAL HEAT CONDUCTION EQUATION

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Abstract

In this article, we sudy conformable fractional heat conduction equation. Applying the method of seperation variables to this problem, we get a conformable Sturm–Liouville eigenvalue problem. Later, we prove the existence of a countably infinite set of eigenvalues and eigenfunctions. Finally, we establish uniformly convergent expansions in the eigenfunctions.

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