EXISTENCE OF POSITIVE SOLUTIONS FOR REGULAR FRACTIONAL STURM–LIOUVILLE PROBLEMS

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Abstract. In this article we investigate existence and nonexistence results for some regular fractional Sturm-Liouville problems. We find the eigenvalues intervals of this problem may or may not have a positive solution. Some sufficient conditions for existence and nonexistence of positive solutions are given. Further, we study some special properties of positive solutions. We give some examples at the end.

Mathematics subject classification (2010): 34A08, 35B09, 34K10.
Keywords and phrases: Positive solution, fixed point theorem, fractional differential equation.

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