

FRACTIONAL BOUNDARY VALUE PROBLEMS (BVPS) AND  
LYAPUNOV TYPE INEQUALITY

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**Abstract**

In this talk we prove a sufficient condition for the existence and uniqueness of solutions of linear fractional differential equations involving sequential derivative with Riemann Liouville fractional derivative of order  $\alpha$  ( $0 < \alpha \leq 1$ ) by using Lyapunov type inequality. As far as we know, this approach is quite new and the connection between BVPs and Lyapunov type inequality obtained for these kind of fractional differential equations is given for the first time.

**Keywords:** Boundary value problems, sequential fractional derivative, Lyapunov type inequalities

**References**

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