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INTEGRAL INEQUALITIES OF LEVINSON'S TYPE IN TIME SCALE SETTINGS

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Abstract. A new class of functions, $\mathcal{K}_1^c(I)$, has been recently introduced by Baloch, Pečarić and Praljak. The authors proved that $\mathcal{K}_1^c(I)$ is the largest class of functions for which Levinson's inequality holds under Mercer's assumptions. We obtain Levinson's type inequalities in time scale settings by using the class $\mathcal{K}_1^c(I)$ and some known results regarding integral inequalites for convex (concave) functions on time scale sets.

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