INTEGRAL INEQUALITIES OF LEVINSON’S TYPE IN TIME SCALE SETTINGS

JOSIPA BARIĆ, JOSIP PEČARIĆ AND DAJANA RADIŠIĆ

Abstract. A new class of functions, $K^c_{I}(I)$, has been recently introduced by Baloch, Pečarić and Praljak. The authors proved that $K^c_{I}(I)$ 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 $K^c_{I}(I)$ and some known results regarding integral inequalities for convex (concave) functions on time scale sets.


Keywords and phrases: Levinson’s inequality, Jensen’s inequality, time scale calculus.

REFERENCES