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On Bennet-Leindler type dynamic inequalities

B. Kaymakçalan¹, N.N. Pelen²

¹ *Cankaya University, Ankara, Turkey, billurkaymakcalan@gmail.com*

² *On Dokuz Mayıs University, Samsun, Turkey, neslihan.pelen@omu.edu.tr*

Abstract

This presentation will serve as a survey of the Hardy, Copson, and its converses, which are Bennet, and Leindler type inequalities in the classical continuous, discrete cases as well as their time scales developments in the delta calculus set-up. Nabla time scale versions of these results, recently obtained by the authors, will also be given. Finally, an attempt of a proposition will be made in the more general dynamic inequalities sense of the above mentioned cases, by use of the diamond-alpha type integrals, so that all of the aforementioned results may be obtained as consequences of this most general set-up of time scale calculus.

Key Words: Bennet and Leindler type inequalities.

References

- [1] S.H. Saker, D. O'Regan, R.P. Agarwal, Converses of Copson's inequalities on time scales, Math. Ineq. App., 18 (2015), 241-254.
- [2] S.H. Saker, D. O'Regan, R.P. Agarwal, Generalized Hardy, Copson, Leindler and Bennett inequalities on time scales, Math. Nachr., 287 (2014), 686-698.