

**Title:** New Carlson-Bellman and Hardy-Littlewood dynamic inequalities

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### **Abstract.**

In this paper, we will prove some new dynamic inequalities of Carlson and Hardy-Littlewood types on an arbitrary time scale  $\mathbb{T}$ . These inequalities as special cases contain the classical continuous and discrete Carlson-Bellman and Hardy-Littlewood type inequalities. The results will be proved by employing the time scales Hölder inequality, some algebraic inequalities and some basic lemmas designed and proved for this purpose.