

## SOME RESULTS ON DELTA, NABLA AND DIAMOND ALPHA PACHPATTE TYPE DYNAMIC INEQUALITIES

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**Abstract.** *Pachpatte type inequalities are obtained by convex generalizations of Hardy-Copson type inequalities. After their appearance in the discrete and continuous cases, they were unified in the time scale calculus. In this talk, we show literature review for delta and nabla Pachpatte type inequalities. Then we present diamond alpha unifications of such inequalities. Some of obtained inequalities are novel not only for the diamond alpha calculus but also for the special cases, which are delta, nabla, continuous and discrete cases.*

**Key words:** Delta time scale calculus, nabla time scale calculus and diamond alpha time scale calculus, Pachpatte's inequality, convexity.

**Mathematics Subject Classification:** 34N05, 26D10, 26D15.

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