Some Linear and Nonlinear Integral Inequalities on Time Scales in Two Independent Variables

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Abstract: We establish some linear and nonlinear integral inequalities of Gronwall–Bellman–Bihari type for functions with two independent variables on general time scales. The results are illustrated with examples, obtained by fixing the time scales to concrete ones. An estimation result for the solution of a partial delta dynamic equation is given as an application.

Keywords: *integral inequalities; Gronwall–Bellman–Bihari inequalities; time scales; two independent variables.*

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