



**AN EXTENSION AND IMPROVEMENT OF THE GRÜSS
INEQUALITY FOR FUNCTIONS OF TWO INDEPENDENT
VARIABLES ON TIME SCALES**

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Abstract

The aim of this paper is to establish an extension and improvement of the Grüss inequality for functions in two independent variables on time scales. Moreover, we present some applications for the Grüss inequality which give new inequalities.

Keywords and phrases: Grüss's inequality, integral inequalities, time scales.