

ULAM STABILITY OF SOME VOLTERRA EQUATIONS

Sebaheddin Şevgin¹, Pınar Yurdakul

^{1,2} *Yüzüncü Yıl University, Van, Turkey*

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Abstract

In 1940, Ulam posed the following problem: “Give conditions in order for a linear mapping near an approximately linear mapping to exist” [1]. In 1941, this problem was solved by Hyers [2] in the case of Banach space. In 1978, the result of Hyers was generalized by Rassias [3] for approximately linear mappings. The results obtained by Hyers and Rassias can be applied to the case various differential and integral equations [4, 5, 6].

In this talk, we analyse the Hyers-Ulam stability and Hyers-Ulam-Rassias stability of some Volterra equations.

Keywords: Hyers-Ulam stability, Hyers-Ulam-Rassias stability, Volterra equations

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¹Sebaheddin Şevgin: ssevgin@yahoo.com