

On the Hyers-Ulam stability of some classical operators

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In 1940, Stanisław Marcin Ulam gave a talk before a Mathematical Colloquium at the University of Wisconsin in which he discoursed a number of important unsolved problems. Among those was a question concerning the stability of homomorphisms [1]. In 1941, Hyers published an article and gave an answer to the problem of Ulam for additive functions defined on Banach spaces [2]. In the following years this problem grew in popularity and many authors published articles on the stability of functional equations. As a result of the problem posed by Ulam, and afterwards the response Hyers gave to this problem, this terminology, which was included in many studies, was named "Hyers-Ulam Stability". This terminology has been continued and used for differential equations and various integral equations as well as functional equations.

In this talk, we will focus on the Hyers-Ulam stability terminology and refer about the Hyers-Ulam stability of some classical operators from approximation theory that have attracted considerable attention recently.

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