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On Stability of Homomorphisms on Banach Algebras

In 1940, S. M. Ulam raised a question concerning stability of group homomorphisms. For Banach spaces the Ulam problem was first solved by D. H. Hyers in 1941, and then Th. M. Rassias in 1978 generalized Hyers' theorem. In 1992, a generalization of Rassias' theorem was obtained by Găvruta for the Cauchy equation. This stability phenomenon is called the generalized Hyers-Ulam-Rassias stability. Since then, the stability problems of various mappings have been investigated. One of the interesting functional equations is f(x y)=f(x) f(y). This talk is devoted to study of generalized Hyers-Ulam-Rassias stability of homomorphisms on Banach algebras.

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