Hyers-Ulam Stability of Quantum Logic Fuzzy Implication

By

Najat Mohammad Abed Abdelqader

Supervisor

Prof. Iqbal H. Jebril

Al-Zaytoonah University of Jordan, 2022

Abstract

Recently, many works about Fuzzy implications over triangular norms and triangular co-norms have been published in the literature. In fuzzy logic we have four kinds of fuzzy implication which called (S, N)-Implications, R-Implications, QL-Implications, and D-Implication. Recently, there is only one research studied the Hyers-Ulam stability for (S, N)- implication of two functional equations. In this thesis, It is interested to study Hyers-Ulam stability of functional equations with fuzzy implications for $QL-$implication.

Keywords: Fuzzy implication, $QL-$implication, Stability.