ON THE GENERALIZED HYERS–ULAM STABILITY
OF SWIATAK’S FUNCTIONAL EQUATION

BOUIKHALENE BELAID, ELQORACHI ELHOUCIEN
AND THEMISTOCLES M. RASSIAS

Abstract. In this paper we shall study the generalized Hyers-Ulam stability of Swiatak’s functional equation
\[ f(x + y) + f(x - y) = 2f(x) + 2f(y) + g(x)g(y), \quad x, y \in G, \]
where \( G \) is an abelian group and \( f, g : G \rightarrow \mathbb{C} \) are complex-valued functions satisfying the condition \( g(e) \neq 0 \).

Key words and phrases: Functional equations, Hyers-Ulam-Rassias stability.

REFERENCES


[22] Swiatak H., *On two functional equations connected with the equation \( \phi(x + y) + \phi(x - y) = 2\phi(x) + 2\phi(y) \)*, Aequationes Math. **5** (1970), 3–9.


