HYERS–ULAM–RASSIAS STABILITY OF A GENERALIZED PEXIDER FUNCTIONAL EQUATION

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This paper is dedicated to Professor Themistocles M. Rassias.

Submitted by C. Park

Abstract. In this paper, we obtain the Hyers–Ulam–Rassias stability of the
generalized Pexider functional equation

\[ \sum_{k \in K} f(x + k \cdot y) = |K|g(x) + |K|h(y), \ x, y \in G, \]

where \( G \) is an abelian group, \( K \) is a finite abelian subgroup of the group of
automorphism of \( G \).

The concept of Hyers–Ulam–Rassias stability originated from Th.M. Rassias’
Stability Theorem that appeared in his paper: On the stability of the linear

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