Erratum

Erratum to: Stability of functional equations on hypergroups

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Erratum to: Aequat Math (2015) 89:1475–1483 DOI 10.1007/s00010-014-0326-y

In this paper the following changes should be made.

Theorem 2 should read as follows:

Theorem 2. *Let K be an amenable discrete hypergroup and let $f, g, h, k : K \rightarrow \mathbb{C}$ be functions, where f is unbounded. Then the function*

$$(x, y) \mapsto f(x * y) - g(x)h(y) - k(y)$$

is bounded if and only if we have

$$\begin{aligned} f(x) &= cm(x) + \varphi(x) + b_1(x), \\ g(x) &= cm(x) + \varphi(x) + b_2(x), \\ h(x) &= m(x), \\ k(x) &= \varphi(x) + b_3(x), \end{aligned}$$

where $m : K \rightarrow \mathbb{C}$ is an exponential, $b_1, b_2, b_3 : K \rightarrow \mathbb{C}$ are bounded functions, c is a complex number, and $\varphi : K \rightarrow \mathbb{C}$ satisfies the functional equation

$$\varphi(x * y) = \varphi(x)m(y) + \varphi(y) \tag{1}$$

for each x, y in K , further, if b_2 is nonzero, then m is bounded.

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