



Erratum

Erratum to: On a functional equation on groups arising from the characterization of stochastic distance measures

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As stated in the paper, Theorem 2 cited from [1] does not hold. It should be replaced by the following trivial result:

Theorem 2. *Let G be a group and \mathbb{K} be a field of characteristic different from 2. If the central function $f : G \rightarrow \mathbb{K}$ is a solution of*

$$f(xy) + f(yx) = 2f(x) + 2f(y) \quad (1)$$

for all $x, y \in G$, then $f \in \text{Hom}(G, \mathbb{K})$. The converse is also true.

One should note that if the unknown function f is not central, this result does not hold. Several of the results within the paper were based upon Theorem 2 and because of this, the unknown function f needs to be assumed to be central in the following lemma, theorems, and corollaries: Theorem 7, Corollary 8, Corollary 9, Corollary 10, and Lemma 12. Similarly, in Theorem 13 the unknown functions f and g also need to be assumed to be central.

With these additional conditions the results within the paper still extend the previously known results of Riedel and Sahoo in [2–4].

References

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- [3] Riedel, T., Sahoo, P.K.: On a generalization of a functional equation associated with the distance between the probability distributions. *Publ. Math. Debrecen* **46**, 125–135 (1995)
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