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TITLE OF PAPER

FIRST AUTHOR[1] AND SECOND AUTHOR[2*]

This paper is dedicated to Professor ABCD

ABSTRACT. The abstract should be informative, precise and not exceed 150 words.

1. Introduction and preliminaries

Here you should state the introduction, preliminaries and your notation. Authors are required to state clearly the contribution of the paper and its significance in the introduction. There should be some survey of relevant literature.

1.1. Instructions for author(s).

Manuscripts should be typeset in English with double spacing by using AMS-LaTex. The authors are encouraged to use the BJMA style file that has been developed for LaTeX2e standard and can be found at journal website

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The abstract should not exceed 150 words. The authors should include as footnotes for the first page, Keywords and Phrases as well as 2000 Mathematics Subject Classifications. Other footnotes may also be included in the first page about supporting grants, presentations, etc. 'References' should be listed in alphabetical order according to the surnames of the first author at the end of the paper and should be cited in the text as, [2, 3] or [1, Theorem 4.1].

2. Main results

The following is an example of a definition.

Definition 2.1. Let $\mathcal{X}$ be a real or complex linear space. A mapping $\|\cdot\| : \mathcal{X} \to [0, \infty)$ is called a 2-norm on $\mathcal{X}$ if it satisfies the following conditions:

(1) $\|x\| = 0 \Leftrightarrow x = 0$,
(2) $\|\lambda x\| = \|\lambda\|\|x\|$ for all $x \in \mathcal{X}$ and all scalar λ,
(3) $\|x + y\|^2 \leq 2\left(\|x\|^2 + \|y\|^2\right)$ for all $x, y \in \mathcal{X}$.

TABLE 1.

1	2	3
$f(x)$	$g(x)$	$h(x)$
a	b	c

Here is an example of a table.
This is an example of a matrix

$$T = \begin{bmatrix} 1 & -1 \\ -1 & 2 \end{bmatrix}$$

The following is an example of an example.

Example 2.2. Let $\theta : \mathcal{A} \to \mathcal{A}$ be a homomorphism. Define $\varphi : \mathcal{A} \to \mathcal{A}$ by $\varphi(a) = a_0\theta(a)$. Then we have

$$\begin{aligned} \varphi(a_1 \dots a_n) &= a_0\theta(a_1 \dots a_n) \\ &= a_0^n\theta(a_1)\dots\theta(a_n) \\ &= a_0\theta(a_1)\dots a_0\theta(a_n) \\ &= \varphi(a_1)\dots\varphi(a_n). \end{aligned} \tag{2.1}$$

Hence φ is an n-homomorphism.

The following is an example of a theorem and a proof. Please note how to refer to a formula.

Theorem 2.3. *If $\mathbf{B}$ is an open ball of a real inner product space $\mathcal{X}$ of dimension greater than 1, $\mathcal{Y}$ is a real sequentially complete linear topological space, and $f : \mathbf{B} \setminus \{0\} \to \mathcal{Y}$ is orthogonally generalized Jensen mapping with parameters $s = t > \frac{1}{\sqrt{2}} r$, then there exist additive mappings $T : \mathcal{X} \to \mathcal{Y}$ and $b : \mathbb{R}_+ \to \mathcal{Y}$ such that $f(x) = T(x) + b(\|x\|^2)$ for all $x \in \mathbf{B} \setminus \{0\}$.*

Proof. First note that if f is a generalized Jensen mapping with parameters $t = s \geq r$, then

$$\begin{aligned} f(\lambda(x+y)) &= \lambda f(x) + \lambda f(y) \\ &\leq \lambda(f(x) + f(y)) \\ &= f(x) + f(y) \end{aligned} \tag{2.2}$$

for some $\lambda \geq 1$ and all $x, y \in \mathbf{B} \setminus \{0\}$ such that $x \perp y$.

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Step (I)- the case that f is odd: Let $x \in \mathbf{B} \setminus \{0\}$. There exists $y_0 \in \mathbf{B} \setminus \{0\}$ such that $x \perp y_0$, $x + y_0 \perp x - y_0$. We have

$$\begin{aligned} f(x) &= f(x) - \lambda\, f\left(\frac{x+y_0}{2\,\lambda}\right) - \lambda\, f\left(\frac{x-y_0}{2\,\lambda}\right) \\ &\quad + \lambda\, f\left(\frac{x+y_0}{2\,\lambda}\right) - \lambda^2\, f\left(\frac{x}{2\,\lambda^2}\right) - \lambda^2\, f\left(\frac{y_0}{2\,\lambda^2}\right) \\ &\quad + \lambda\, f\left(\frac{x-y_0}{2\,\lambda}\right) - \lambda^2 f\left(\frac{x}{2\,\lambda^2}\right) - \lambda^2\, f\left(\frac{-y_0}{2\,\lambda^2}\right) \\ &\quad + 2\,\lambda^2\, f\left(\frac{x}{2\,\lambda^2}\right) \\ &= 2\,\lambda^2\, f\left(\frac{x}{2\,\lambda^2}\right). \end{aligned}$$

Step (II)- the case that f is even: Using the same notation and the same reasoning as in the proof of Theorem 2.3, one can show that $f(x) = f(y_0)$ and the mapping $Q : \mathcal{X} \to \mathcal{Y}$ defined by $Q(x) := (4\lambda^2)^n f((2\lambda^2)^{-n}x)$ is even orthogonally additive.

Now the result can be deduced from Steps (I) and (II) and (2.2). □

The following is an example of a remark.

Remark 2.4. One can easily conclude that g is continuous by using Theorem 2.3.

Again, note how we refer to Theorem 2.3 and formula (2.1).

Acknowledgement. Acknowledgements could be placed at the end of the text but precede the references.

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