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TITLE OF PAPER

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Keywords. Analysis, PDEs, machine learning, cybernetics
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2. Main results

Here is an example of a definition.

Definition 2.1. Let A be a C^*-algebra. A mapping $\phi : A \to \mathbb{C}$ is called a positive linear functional on A if it satisfies the following conditions:

(1) $\phi(\alpha x + \beta y) = \alpha\phi(x) + \beta\phi(y)$ for all $\lambda, \beta \in \mathbb{C}$ and $x, y \in A$.
(2) $\phi(x) \geq 0$ for all $a \geq 0$ in A.

Here is an example of a table.

Table 1.

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

Here is an example of a matrix.

$$\begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$$

Here is an example.

Example 2.2. Let A be the C^*-algebra of $n \times n$ complex matrices. Define $Tr : A \to \mathbb{C}$ to be the canonical trace of a matrix. Then we have

$$Tr(\alpha x + \beta y) = \alpha Tr(x) + \beta Tr(y). \tag{2.1}$$

for all $\lambda, \beta \in \mathbb{C}$ and $x, y \in A$. It follows that Tr is linear functional on A.

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

Theorem 2.3. *Let G be a finite group acting on a second countable compact Hausdorff space X. Suppose that μ is a finite Borel measure on X. Then the induced bimodule $\mathcal{H}_\mu \times \mathcal{H}_\mu$ has almost central unit vectors.*

Proof. Since f is uniformly continuous on X there exists $\delta > 0$ such that $|f(x) - f(y)| < \epsilon$ for all $x, y \in X$ with $d(x, y) < \delta$. It follows that

$$\begin{aligned} |f(xr) - f(yr)| &= |f(xr) - f(yr)| \\ &= |f(xr) - f(yr)| \\ &< \epsilon \end{aligned} \tag{2.2}$$

for all $x, y \in E_n$, $r \in G$, $n > \frac{2}{\delta}$. Let $\triangle = \{(s, s) : s \in G\}$ be the diagonal of $G \times G$. It follows from Equation (2.2) that $||\pi(f)U(r)\zeta_n - \zeta_n\pi(f)U(r)|| \to 0$ for all $f \in C(X)$, $r \in G$. □

The following is an example of a remark.

Remark 2.4. The purpose of this remark is to refer to the Theorem 2.3. We also want to [3, 4].

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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