1122-46-175 **David R Pitts*** (dpitts2@unl.edu), Department of Mathematics, University of Nebraska–Lincoln, Lincoln, NE 68588. *Unique Pseudo-Expectations and Minimal Norms.*

Let $(\mathcal{D}, \Gamma, \alpha)$ be a C^*-dynamical system where Γ is a discrete group and $\mathcal{D}$ is a unital abelian C^*-algebra. Let $\mathcal{A}$ be the twisted convolution algebra of all finitely supported functions from Γ into $\mathcal{D}$. Generally, there are many C^*-norms on $\mathcal{A}$: there is always a maximal one, but not a minimal one. But when Γ acts topologically freely, there is a minimal C^*-norm on $\mathcal{A}$, which follows from Theorem A below.

A regular MASA inclusion is a pair $(\mathcal{C}, \mathcal{D})$ of unital C^*-algebras where $\mathcal{D} \subseteq \mathcal{C}$ is a MASA and the set

$$\mathcal{N} := \{v \in \mathcal{C} : v\mathcal{D}v^* \cup v^*\mathcal{D}v \subseteq \mathcal{D}\}$$

has dense span in $\mathcal{C}$.

Let $I(\mathcal{D})$ be the injective envelope for $\mathcal{D}$. When $(\mathcal{C}, \mathcal{D})$ is a regular MASA inclusion, there is a unique pseudo-expectation $E : \mathcal{C} \to I(\mathcal{D})$. The left kernel of E is the unique ideal $\mathcal{L}$ of $\mathcal{D}$ maximal subject to $\mathcal{D} \cap \mathcal{L} = (0)$.

Theorem A. *If $(\mathcal{C}, \mathcal{D})$ is a regular MASA inclusion such that $\mathcal{L} = (0)$ and $\mathcal{A} = \operatorname{span} \mathcal{N}$, there are unique minimal and maximal C^*-norms on $\mathcal{A}$.* (Received August 12, 2016)