

## The covariant Stone-von Neumann uniqueness theorem

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In this talk, we formulate and prove a version of the Stone-von Neumann Theorem for every  $C^*$ -dynamical system of the form  $(G, \mathbb{K}(\mathcal{H}), \alpha)$ , where  $G$  is a locally compact Hausdorff abelian group and  $\mathcal{H}$  is a Hilbert space. The novelty of our work stems from our representation of the Weyl Commutation Relation on Hilbert  $\mathbb{K}(\mathcal{H})$ -modules instead of just Hilbert spaces, and our introduction of two additional commutation relations, which are necessary to obtain a uniqueness theorem.