1120-47-83 **Justin R. Peters*** (peters@iastate.edu), Department of Mathematics, Iowa State University, Ames, IA 50011, and **Preechaya Sanyatit**. *A class of commutative operator algebras.* Preliminary report.

Let α be a positive irrational number, and let $\mathcal{A}_\alpha$ be the set of continuous functions on the 2-torus $\mathbb{T}^2$ satisfying $\hat{f}(m,n) = 0$ whenever $m + \alpha n < 0$. These algebras and other subalgebras of continuous functions on compact groups were studied by Wermer, Gleason, Gamelin and others in the 1950's and 60's. These algebras $\mathcal{A}_\alpha$ are Dirichlet algebras, they are maximal subalgebras of $C(\mathbb{T}^2)$, and have various properties related to analyticity. None of the properties they studied, however, distinguished between $\mathcal{A}_\alpha$ and $\mathcal{A}_\beta$ if α and β are two positive irrationals. From the operator algebra viewpoint it is natural to ask: Are these algebras in fact indistinguishable?

We can also describe the automorphism group of the $\mathcal{A}_\alpha$. (Received February 13, 2016)