ISTANBUL ANALYSIS SEMINARS

ON THE C*-ALGEBRA GENERATED BY TOEPLITZ OPERATORS AND FOURIER MULTIPLIERS ON THE HARDY SPACE OF A LOCALLY COMPACT GROUP

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Abstract: Let G be a locally compact abelian Hausdorff topological group which is noncompact and whose Pontryagin dual Γ is partially ordered. Let $\Gamma^+ \subset \Gamma$ be the semigroup of positive elements in Γ . The Hardy space $H^2(G)$ is the closed subspace of $L^2(G)$ consisting of functions whose Fourier transforms are supported on Γ^+ . In this talk we consider the C^* -algebra $C^*(\mathcal{T}(G) \cup F(C(\Gamma^+)))$ generated by Toeplitz operators with continuous symbols on G which vanish at infinity and Fourier multipliers with symbols which are continuous on one point compactification of Γ^+ on the Hilbert-Hardy space $H^2(G)$. We characterize the character space of this C^* -algebra using a theorem of Power.

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