SEMINARIUM UKŁADY DYNAMICZNE

Tytuł:Isomorphisms between the left uniform compactification of locally compact groupsReferent:Safoura ZadehData:13 IV 2018

For a locally compact group G, let $C_b(G)$ be the space of all complex-valued, continuous and bounded functions on G equipped with the sup-norm, and LUC(G) be the subspace of $C_b(G)$ consisting of all functions f such that the map $G \to C_b(G)$; $x \mapsto l_x f$ is continuous, where $l_x f$ is the function defined by $l_x f(y) = f(xy)$, for each $y \in G$. The subspace LUC(G) forms a unital commutative C*-algebra. We can induce a multiplication on the Gelfand spectrum of LUC(G), G^{LUC} , with which G^{LUC} forms a semigroup. When G is discrete, G^{LUC} is in fact the Stone-Čech compactification of G. In this talk, I study some properties of G^{LUC} , the so called right topological semigroup compactification of G. I also discuss the question of when the corona, $G^{LUC} \setminus G$, determines the underlying topological group G.