

PRINCIPAL INVARIANT SUBSPACES FOR UNITARY
REPRESENTATIONS OF LCA GROUPS

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Abstract

We will present the basic properties of shift invariant subspaces on the real line from a very simple point of view that reduces them to the properties of weighted L^2 spaces on the interval $[0,1)$. The methods extend to general locally compact Abelian Groups and unitary representations of the groups acting on appropriate Hilbert spaces. Even in the classical case there are results that are new. This is work that is being conducted in a collaboration with Eugenio Hernandez, Hrvoje Sikic and Ed Wilson.