

Operator Algebras

Unitary representations of the group of measurable functions
with values in the circle

Slawomir Solecki

University of Illinois at Urbana-Champaign, U.S.A.

I will give a classification of unitary representations of certain Polish, not necessarily locally compact, groups: the group of all measurable functions with values in the circle and the groups of all continuous functions on compact, second countable, zero-dimensional spaces with values in the circle. In the proofs of the classification results, certain structure theorems for linear operators will be used. I will connect this classification result with a conjecture (still open) of Glasner and Weiss on the structure of the closed group generated by a generic measure preserving transformation.