WIENER'S PROBLEM ABOUT CYCLIC VECTORS, AND PIATETSKI-SHAPIRO'S UNIQUENESS PHENOMENON

NIR LEV

(KTH, Stockholm, Sweden)

This is joint work with A. Olevskii. We consider the following two problems:

(1) If a compact K supports a distribution whose Fourier transform belongs to a certain space, does it also support a measure with this property?

(2) Which are the functions in $l^p(Z)$ or $L^p(R)$ whose set of translates spans the whole space?