

# Codimension of certain subspaces of $L^\infty(\mathbb{R})$ and Perron-Frobenius operators

Francisco M. Canto Martín

## **Abstract**

In this talk we will discuss some possible extensions to a recent result of H. Hedenmalm and A. Montes concerning the weak-star density of subspaces generated by exponential functions in  $L^\infty(\mathbb{R})$  and  $L^\infty(0, \infty)$ . We will see the connection of these results with the notion of a Heisenberg uniqueness pair, introduced in the work of these two authors. Dynamical systems, and more specifically Perron-Frobenius operators, play a prominent role and a brief exposition of the main tools that are needed will be presented. The talk is based on a joint work with H. Hedenmalm and A. Montes.