



**Київське математичне товариство**

<http://www.mathsociety.kiev.ua/>

**КИЇВСЬКИЙ МАТЕМАТИЧНИЙ КОЛОКВІУМ**

## **The Hilbert transform intertwines a Perron-Frobenius operator**



**Alfonso Montes Rodriguez**

*Department of Mathematical Analysis, University of Sevilla, Spain*

A Heisenberg uniqueness pair is a pair  $(\Gamma, \Lambda)$ , where  $\Gamma$  is a curve and  $\Lambda$  is a set in the plane  $\mathbb{R}^2$ , with the following property: any finite Borel measure  $\mu$  in the plane supported on  $\Gamma$ , which is absolutely continuous with respect to arc length, and whose Fourier transform  $\mu^\wedge$  vanishes on  $\Lambda$ , must automatically be the zero measure. It will be shown how Perron-Frobenius operators are intimately related to the Hilbert transform and to the Heisenberg uniqueness pairs associated with the hyperbola  $x_1 x_2 = 1$ .

**31 березня** (п'ятниця) 2017 року, початок о 15.00 в к. 305

**Інститут математики НАНУ, вул.Терещенківська, 3**

Запрошуються всі бажаючі