

HARMONIC AND SPECTRAL ANALYSIS

International Zoom Conference

June 8–10, 2020

Sets of p -restriction and p -spectral synthesis

MICHAEL PULS

John Jay College of the City University of New York

Let E be a closed set in \mathbb{R}^n . Recall that E is a set of spectral synthesis if there is only one closed ideal in $L^1(\mathbb{R}^n)$ with zero set E . In this talk we will extend the concept of spectral synthesis to $L^p(\mathbb{R}^n)$ for closed sets E that have the p -restriction property for some $p \in (1, 2)$. If time permits we will also give a connection between sets E of p -restriction and the problem of determining if the translations of $f \in L^1(\mathbb{R}^n) \cap L^p(\mathbb{R}^n)$ span $L^p(\mathbb{R}^n)$ when E is the zero set of f .