



Special Colloquium

UCR
Mathematics
Department

DR. BOBBY WILSON
MIT

"PROJECTIONS IN BANACH SPACES AND HARMONIC ANALYSIS"

In this talk, we will discuss the measure theoretic principles of orthogonal projections that follow from the classical Besicovitch-Federer projection theorem. The Besicovitch-Federer projection theorem offers a characterization of rectifiability of one-dimensional sets in \mathbb{R}^d by the size of their projections to lines. We will focus on the validity of analogues to the Besicovitch-Federer projection theorem with respect to such sets in general Banach spaces. In particular, we will show that the projection theorem is false when the Banach space is infinite-dimensional and discuss related applications to questions in Harmonic Analysis. This is joint work with Marianna Csornyei and David Bate.

900 University Avenue
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Tuesday, January 23rd, 2018

Surge 284

Tea Time @ 2:00 p.m.

Talk Begins @ 2:10 p.m.

Ends @ 3:10 p.m.

