## Rigidity and Weak Mixing in Infinite Ergodic Theory Rachel Bayless

## Abstract

The compatibility of rigidity and weak mixing has been well studied for transformations that preserve a finite measure. In infinite ergodic theory, however, there are many nonequivalent definitions of weak mixing. In this talk we will discuss the compatibility of rigidity and various types of weak mixing. We will also construct transformations that have both of these properties. The constructions will be obtained via cutting and stacking. (This is joint work with Kelly Yancey - University of Maryland).