

|Title: Restricted orbit equivalence: what it is and what it is not

Abstract: Restricted orbit equivalence was invented by Rudolph in the eighties, and features the so-called sizes which allow him to put Ornstein's remarkable machinery in a much more general setup. Quoting Elliott's Zentralblatt review "For three specific sizes,

m_0 , m_x , and m_∞ (here x denotes the function $x \rightarrow x$ on \mathbb{Z}^+), the corresponding restricted orbit equivalence theorems are, respectively, Dye's orbit equivalence theorem, Kakutani's equivalence theorem, and Ornstein's isomorphism theorem."

In this talk, I will explain what a size is, and then discuss how one can hope to apply restricted orbit equivalence to quantitative orbit equivalence. This is based on an ongoing effort with Matthieu Joseph and Romain Tessera to understand the book Restricted orbit equivalence for amenable groups by Kammeyer and Rudolph.