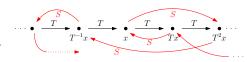
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Main interest: Orbit equivalence

 (X, μ) standard probability space.

$$T, S \colon X \to X$$
 μ -preserving bijections satisfying $\{T^n x \mid n \in \mathbb{Z}\} = \{S^n x \mid n \in \mathbb{Z}\}$



Quantitative orbit equivalence: adding restrictions on the distortions \rightarrow notion of φ -integrable orbit equivalence (the faster $\varphi \colon \mathbb{R}_+ \to \mathbb{R}_+$ goes to $+\infty$, the stronger is the restriction)

Theorem (Kerr, Li 2023)

log-integrable orbit equivalence preserves entropy.

Theorem (C. 2025+)

For every $\alpha < 1$, \log^{α} -integrable orbit equivalence does not preserve entropy.

The counter-examples:

Odometer S



Odomutant T