



Ergodicity of Topological Dynamical Systems

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Abstract

Each continuous mapping $\varphi : X \rightarrow X$ on a compact Hausdorff space X induces a linear operator

$$T_\varphi : C(X) \rightarrow C(X), \quad f \mapsto f \circ \varphi,$$

on the Banach space $C(X)$ of continuous functions $f : X \rightarrow \mathbb{C}$. This operator can be examined in terms of its ergodic behaviour. In this talk we study properties of φ under the assumption that T_φ satisfies various ergodic conditions. These include (uniform) mean ergodicity and Jacob-de Leeuw-Glicksberg admissibility.

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