

SEMINARIO

SISTEMAS DYNAMICOS

EXPOSITOR

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TITULO

Quantitative multiple recurrence for two and three transformations.

Abstract:

In this talk I will provide some counter examples for quantitative multiple recurrence problems for systems with more than one transformation. For instance, I will show that there exists an ergodic system $(X, \mathcal{X}, \mu, T_1, T_2)$ with two commuting transformations such that for every $\ell < 4$ there exists $A \in \mathcal{X}$ such that $\mu(A \cap T_1^n A \cap T_2^n A) < \mu(A)^\ell$ for every $n \in \mathbb{N}$.

The construction of such a system is based on the study of "big" subsets of $\mathbb{N}^2$ and $\mathbb{N}^3$ satisfying combinatorial properties.

This a joint work with Wenbo Sun.

Lunes 10 de Abril a las 16:00 hrs, Sala de Seminarios John Von Neumann CMM, séptimo piso, torre norte, Beauchef 851.

