

SEMINARIO SISTEMAS DINÁMICOS DE SANTIAGO.

EXPOSITOR(A) Juan Marshall (Universidad de Chile)

TÍTULO *Spectral Theory of Substitutions*

RESUMEN Given a finite alphabet, a substitution is a rule that assigns to each letter a nontrivial word over the same alphabet. Although they are simple combinatorial objects, substitutions arise across a wide range of mathematical disciplines, including combinatorics on words, theoretical computer science (automata theory), number theory (Diophantine approximation, multiplicative functions), mathematical physics (quasicrystals), and ergodic theory (induced systems).

In this talk, we will review recent work on the spectral properties of substitution dynamical systems, as well as other parabolic systems for which substitutions provide excellent test cases, such as interval exchange transformations and linear flows on translation surfaces.

DÍA / HORA Lunes 1º de diciembre, 2025 / 16:30 - 17:30

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