

SEMINARIO SISTEMAS DINÁMICOS DE SANTIAGO.

EXPOSITOR(A): Mélodie Andrieu (Université du Littoral Côte d'Opale).

TÍTULO: *Complexities of words generated by a billiard in the hypercube.*

IDIOMA: Inglés.

RESUMEN: Sturmian words form a class of binary infinite words which sheds light, through its equivalent definitions, on remarkable interactions between combinatorics, dynamical systems, and number theory. They give rise to several generalizations over the d -letter alphabet, for $d \geq 3$. A large program, initiated in the 80s, is to determine which characteristic properties of Sturmian words each of these generalizations still satisfy.

My talk will focus on one dynamical representations of Sturmian words: as words generated by a billiard on a square table, which generalizes itself to a billiard in the cube, and in the cube of dimension d ; and on two combinatorial quantities which characterize Sturmian words: the subword complexity and the abelian complexity.

DÍA / HORA: Lunes 25 de noviembre, 2024 / 16:30 - 17:30 hrs.

LUGAR: Sala de Seminarios (7° piso), Facultad de Ciencias Físicas y Matemáticas (Edificio Beauchef 851), Universidad de Chile.