

SEMINARIO

SISTEMAS DINÁMICOS

Speaker

Glenn Merlet
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Title

"Limit theorems for products of non-negative and tropical random matrices"

Abstract:

Tropical matrices are matrices with entries in $(\mathbb{R} \cup \{-\infty\}, \max, +)$, where $\max$ is seen as the "addition". They appear as the limit of nonnegative matrices and in models from computer science/operations research, as they are strongly linked to weighted directed graphs. Their dynamical behavior is quite similar to nonnegative matrices, with a kind of Perron-Frobenius theorem but the limits are often reached, which allows some combinatorial studies. In this talk, I will present a common framework, known as topical maps, to deal with both nonnegative matrices and tropical ones. It is too general to study iterates of a given map but it is well suited to understand iterates of random maps, or equivalently products of random matrices. This is work in progress with Loïc Hervé (INSA Rennes).

Lunes 18 de Abril a las 16:30 hrs, en la sala de Seminarios John Von Neumann CMM, séptimo piso, torre norte, Beauchef 851.

