



Contribution ID: 3

Type: **not specified**

”Rigorous enclosure of the discrete spectrum for transfer operators”

Tuesday, 18 June 2024 10:10 (50 minutes)

abstract: In this work, in collaboration with Blumenthal and Taylor-Crush, I present a generalization of a fundamental result, the Gerschgorin circle theorem, to obtain enclosures of the discrete spectrum of a transfer operator preserving a strong Banach space compactly embedded in a weak Banach space. The enclosures are obtained by rigorously bounding the weak resolvent norm of a finite rank approximation of the transfer operator. This result has important consequences, allowing us to understand the finer statistical properties of systems satisfying a Lasota-Yorke inequality, as uniformly expanding maps and systems with additive noise.

Presenter: Dr NISOLI, Isaia (Universidade Federal de Rio de Janeiro)