

# Infinite DLR Measures and Volume-Type Phase Transitions on Countable Markov Shifts

Rodrigo Bissacot

University of São Paulo

## **Abstract:**

We introduce the natural extension of the definition of DLR measure for sigma-finite measures on countable Markov shifts. We prove that the set of DLR measures contains the set of conformal measures associated to Walters potentials. We study when the notions of DLR and conformal coincide. On renewal type shifts we obtained a characterization when the conformal measures are infinite, we study the problem of to describe when the set of conformal measures jumps from finite to infinite measures when we consider high and low temperatures, respectively. Jointly with Eric O. Endo (NYU-Shanghai) and Elmer R. Beltrán (IME-USP).