CMUP
Centro de **Matemática**
Universidade do Porto

Dynamical Systems Seminar

Date. April 11th, 14h30 (Friday)

Place. Room FC1.031

Speaker. Mike Todd (University of St Andrews)

Title. Countable Markov Shifts with exponential mixing

Abstract.

Given a topologically mixing shift on a countable alphabet and a potential, we give criteria for the system to have exponential mixing. That is, criteria for the potential to have an equilibrium state which also has exponential decay of correlations. The first condition is that the potential should have Birkhoff averages on periodic points bounded away from its pressure. The second is that we control the entropy at infinity. Both conditions are sharp (in fact under the second condition, the first is both necessary and sufficient). I will present this joint work with Boyuan Zhao using some motivating examples.

There will be a coffee break after the seminar.