

## Dynamical Systems Seminar

**Date.** January 16th, 14h30 (Friday)

**Place.** Room FC1.031

**Speaker.** João S. Matias (Centro de Matemática da Universidade do Porto)

**Title.** Martingale Methods for Large Deviations and Young Structures

**Abstract.**

In this talk, we explore a martingale approximation framework that provides quantitative estimates for large deviations in invertible dynamical systems. Assuming suitable decay of correlations, we derive these estimates and, as an application, construct Young structures with matching recurrence tails for partially hyperbolic diffeomorphisms with mostly expanding central directions.

There will be a coffee break after the seminar.