

Dynamical Systems Seminar

Date. May 25th, 14h30 (Monday) **Unusual day**

Place. Room FC1.031

Speaker. Baptiste Guillaud (Université de Bretagne Occidentale (UBO), France)

Title. Functional Limit Theorems for the Lorentz Gas in the Infinite-Horizon Setting

Abstract.

Françoise Pène has proven functional limit theorems for Birkhoff sums of observables of the Lorentz gas in the infinite-horizon setting. However, the limiting processes are constant in time. In this talk, I will explain how these results can be revisited using a non-linear time normalization in order to obtain non-trivial limiting processes. I will first consider the case of an integrable observable, and then the case of a centered observable.

There will be a coffee break after the seminar.