



## Seminar/Talk

# Lorentz gas with small scatterers; some non-standard Limit Theorems

**Henk Bruin**

University of Vienna

Host: M. Beiglböck, N. Berestycki, L. Erdős, J. Maas, F. Toninelli, E. Schertzer

A main theme in smooth ergodic theory is to explain and rigorously prove the occurrence of statistical laws for deterministic dynamical systems. If an invariant measure is taken to consider a dynamical system as stochastic process, then this process is at best highly dependent. Lorentz gas is a model of uniform movement with elastic collisions on a grid of convex scatterers, used to describe the motion of electrons in a metal. In this talk, I want to discuss some limit theorems (non-standard Gaussian, local limit) that can be proven when not only times goes to infinity, but also the scatterer size goes to zero.

**Monday, April 22, 2024 05:00pm - 06:00pm**

Mondi 2 (I01.01.008), Central Building



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