



DVR 0065528

Workshop on

"Rare Events in Dynamical Systems"

March 18 - 22, 2024

organized by

Françoise Pène (UBO, Brest), Tanja Schindler (U of Vienna), Roland Zweimüller (U of Vienna)

• Monday, March 18th, 2024

09:00 – 09:30 **Registration & Welcome**

09:30 - 10:30 Mike Todd (U of St Andrews)

Extremes and self-recurrence

10:30 – 11:00 **Coffee Break**

11:00 – 12:00 **Jorge Freitas (U Porto)** *Convergence to decorated Lévy processes for dynamical systems*

12:00 – 13:30 Lunch Break

13:30 – 14:15 **Discussions**

14:15 – 15:15 Max Auer (U of Maryland) Poisson Limit Theorems for Systems with Product Structure

15:15 – 15:45 Coffee Break

15:45 – 16:45 **Maxence Phalempin (Università degli Studi di Firenze)** Averaging result for differential equations perturbed by a Z-periodic Lorentz gas.

• Tuesday, March 19th, 2024

09:30 – 10:30 Sandro Vaienti (U of Toulon) Extreme Value theory and Poisson statistics for stochastic differential equations.

10:30 - 11:00 Coffee Break

11:00 – 12:00 Meagan Carney (U of Queensland, Brisbane) Runs of Extremes of Observables and Applications

12:00 - 13:30 Lunch Break

13:30 - 16:45 Hike

• Wednesday, March 20th, 2024

09:30 – 10:30 **Peter Balint (BME, Budapest)** *Generalized law of iterated logarithm in the infinite horizon Lorentz gas*

10:30 - 11:00 Coffee Break

11:00 – 12:00 Nasab Yassine (UBS) Quantitative recurrence for Z-extension of three-dimensional Axiom A flows $12{:}00-13{:}30 \text{ Lunch Break}$

13:30 – 15:15 Discussions

15:15 – 15:45 **Coffee Break**

15:45 – 16:45 **Dylan Bansard-Tresse (Ecole Polytechnique)** *TBA*

• Thursday, March 21st, 2024

09:30 – 10:30 **Philipp Kunde (Jagiellonian U, Krakow)** Dichotomy results for eventually always hitting time statistics

10:30 – 11:00 **Coffee Break**

11:00 – 12:00 **Henna Koivusalo (U Bristol)** Dynamical subsets in iterated function systems

12:00 – 13:30 Lunch Break

13:30 – 15:15 **Discussions**

15:15 – 15:45 **Coffee Break**

15:45 – 16:45 **Tomas Persson (Lund U)** *Fractional response and a parameter almost sure invariance principle for the quadratic family*

18:30 – 22:00 Conference Dinner

• Friday, March 22nd, 2024

09:30 – 10:30 **Hong-Kun Zhang (UMass Amherst)** Advancing learning in Chaotic Systems with Novel Neural Network Techniques

10:30 – 11:00 **Coffee Break**

11:00 - 12:00 Matthew Nicol (U of Houston)

Convergence of Birkhoff sums of heavy-tailed observables on Gibbs-Markov systems to stable laws and applications (joint with An Chen and Andrew Torok)

All talks take place at ESI Boltzmann Lecture Hall!