

Phalempin Maxence | CV

50, Boulevard Sicard – 13 008 Marseille – France

✉ maxence.phalempin@unifi.it

Academic adress : ufficio di Assegnisti del dipartimento di matematica Ulisse Dini,

Viale Giovanni Battista Morgagni, 67/a 50, 134 Firenze, Italy

Academic curriculum

- 2022– Postdoc at Universita degli Studi di Firenze, "Probabilistic aspects and geometrical properties of interacting random systems."
- 2019 – 2022 Ph.D from University of Western Brittany
 - Title : "Stochastic properties in hyperbolic dynamical systems with infinite measure"
 - Advisor : Françoise Pène
- 2015 – 2019 Normalien (remunerated student) in Mathematics at Ecole Normale Supérieure de Rennes (high honors)
- 2018 – 2019 M2.Sc of mathematics and applications in Rennes (high honors)
- 2017 – 2018 Passing Agrégation in mathematics (competitive exam for teaching in high school or undergraduate studies at university) with option in theoretical computer sciences (Rank 45th/315)
- 2016 – 2017 Bachelor in Physics in Rennes (with honors)
- 2015 – 2016 Bachelor in mathematics in Rennes (with honors)
- 2012 – 2015 CPGE (Classe préparatoire aux grandes écoles) MPSI-MP* at Lycée Saint Louis (Paris VIth)

languages.....

French : native language

English : fluent (English assesment, TOEIC 880/990)

Italian : notions

computer sciences.....

programming languages : Caml, Python

formal/numeric calculus : scilab, maple

Research, submitted work

keywords : ergodic theory, hyperbolic dynamics, perturbed operator, probability, statistical physics.

Submitted article :

"Limit theorems for self-intersecting trajectories in \mathbb{Z} -extensions"
(arXiv:2201.01980).

Pedagogic activities and administrative duties

- Teaching load (2019-) involving exercises sessions in probability theory, topology in \mathbb{R}^n , statistics and complements for agregation.
- "Fête de la science" (2019 and 2021) : popularization event settled for wide audience, consisting in providing quick activities involving mathematical concepts.
- Organization of Ph.D students seminars in Brest (2020-2021).
- Participation into some Ph.D students seminars :
Brest (early 2020): "Construction of measures for topological dynamics."
Rennes Ph.D students seminar in probability (2021): "Mixing measures in hyperbolic dynamics."
Brest (2021): "Introduction on transfer operators : from Markov chain to Anosov flows."
Amiens (2022) : "Introduction to tranfer operator in studying limit theorems for hyperbolic dynamical systems"
- Ph.D referee at the mathematics department council of Brest (2019-2021)
- Ph.D referee at the mathematics laboratory (LMBA) council of Brest (2021-2022)

Lectures in talks.

- Dynamics Seminar at Centro de Giorgi, 14 November 2023, Pisa (France)
- Workshop "Limit Theorems for Slowly Mixing Systems", ICMS, Edimbourg (United Kingdom)
- dynamical systems and probability seminar, team SYMPA, 22 February 2022, Amiens (France)
- Winter school on Billiards 17-21 January, Autrans (France)
- LPSM ergodic theory seminar, Sorbonne University Pierre et Marie Curie (Paris VI) 3 January 2022 France
- dynamical system seminar, Aix-Marseille university 30 november
- Colloquium young probabilists and statisticians 28 October 2021, Saint Pierre d'Oléron (France).
- Annual meeting of GDR AMA (Auto similarity and Multifractal Analysis) 27 September 2021 France.
- Ergodic theory seminar in Rennes I 20 september 2021

- Dynamical systems and probability seminar, University of Brest 4 March 2021

Other research experience and attended talks

- Days in Probability and Statistical Physics, Firenze 20 November 2023
- Conference on Dynamics and Finance: from KAM Tori to ETFs, ICTP Trieste, 9-13 October 2023
- Conference "Regular and Stochastic Behavior in Dynamical Systems" Pisa 5-9 June 2023
- Conference "Probabilistic methods in dynamics" Pisa 29 May - 1 June 2023
- Conference "Statistical and Computational Aspects of Dynamics" Pisa 13-16 December 2022
- Conference "Probabilistic techniques for random and time-varying dynamical systems". CIRM 3-7 October 2022
- Poster at GDR PLATON Young researchers days CIRM 15-17 November 2021
- Finisterian summer school in dynamical systems (GDR PLATON), University of Brest 21-25 June 2021
- Spring School on Transfer Operators (Classical and Modern Techniques) Lausanne (actually online) 22-26 March 2021
- Stochastic Processes under Constraints, MFO Oberwolfach (hybrid meeting), 27-3 October 2020
- Conference in Thermodynamic Formalism: Dynamical Systems, Statistical Properties and their Applications. CIRM 9-13 December, 2019
- Lebesgue Doctoral days 28-30 October 2019
- Workshop in Thermodynamic Formalism : Ergodic Theory and Validated Numerics CIRM 8-12 July 2019
- The sixth workshop of the Italian dynamicists, Dinamici VI, Pisa 4-7 June 2019
- Ergodic Theory, Probabilities and interactions, Days in Honor of Emmanuel Lesigne University of Tours 27-29 May 2019