

Edouard Daviaud

Curriculum Vitae

Born on the 06/09/1990

Nationality: French

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University of Paris -Est Créteil

Current position

- September 2021 – present **PHD Thesis and ATER position in Université Paris-Est Créteil**, defense scheduled in February 2023
- October 2018 – September 2021 **PHD Thesis**, *Advisers: J.Barral and S.Seuret*, title of the PHD thesis: Metric theory of approximation and geometry of self-similar discrete measures

Academic training

- 2016 – 2018 **Second year of Master (Master 2) in pure Mathematics**, Université Pierre et Marie curry
- 2015 – 2016 **Obtention of the external agregation of Mathematics diploma (ranking: 88)**, Université Paris-Sud
- 2014 – 2015 **Year off**
- 2013 – 2014 **Second year of Master (Master 2) in Mathematics teaching**, Université Paris-Sud, Paris
- 2012 – 2013 **First year of Master (Master 1) in pure Mathematics and second year of Magister**, Université Paris-sud
- 2011 – 2012 **Third year of License in pure Mathematics**, Université Paris-Sud
- 2008 – 2011 **CPGE MPSI-MP**, Lycée Jacques Decour

Past research experience

- 2017-2018 **Research internship**, *Advisor : S.Seuret*, Université Paris-Est Créteil, *Ubiquity, mass transference principle and some applications*
- 2013-2014 **Research internship**, *Advisor : N.Thierry*, Université Paris-Sud, *Random walk on R-trivial monoïds*
- 2012-2013 **Research internship**, *Advisor : L.Moonens*, Université Paris-Sud, *Quasi-measure Theory*
- 2011-2012 **Research internship**, *Advisor : D.Harrari*, Université Paris-Sud, *Structure of pro-finite abelian groups*

Publications

Under revision for publication

- 2021 **An anisotropic inhomogeneous ubiquity Theorem**, *arXiv :2112.10413,2021*
[Preprint](#)
- 2022 **Extraction of optimal subsequences of sequence of balls, and application to optimality estimates of mass transference principles**, *arXiv:2204.01304*
- 2022 **A general inhomogeneous mass transference principle**, *arXiv:2204.01302*
- 2022 **Dimension of C^1 self-conformal shrinking targets with overlaps**, *arXiv:2207.0845*
[In preparation \(final phase of redaction\)](#)
- 2022 **Multifractal analysis of discrete self-similar measures satisfying AWSC**

Given talks

Seminars, conferences and workshop

- 2022 **Fractal and related fields**, *Porquerolles island*, France, Dimension of weakly conformal shrinking targets with overlaps
- 2022 **Seminaire Cristolien d'Analyse Multifractale**, *Université Paris-Est Créteil*, France
Inhomogeneous mass transference principles and approximation by open sets
- 2020 **PHD seminar**, *Université Paris-Est Créteil*, France, Seminar
Ubiquity Theorems and partial results on Mahler's conjecture

- 2019 **Journée du GDR 2019**, *Vielsam*, Belgique
Inhomogeneous ubiquity Theorem for anisotropic contractions of balls
- 2018 **PHD seminar**, *Université Paris-Est Créteil*, France
Ubiquity Theorems
- 2018 Animation of a workshop about the article of M.Hochman, On self-similar sets with overlaps and inverse theorems for entropy, *Annals of Mathematics* 180 (2014), no. 2, 773 – 822, *Université Paris-est Créteil*
[Event organized](#)
- 2021 **Journée du GDR 2021**, *Porquerolles*, France

Teaching Experience

[Teaching in 2022-2023](#), *Université Paris-Est Créteil* (103h30)

Arithmetic and groundings, *L1 Mathematics*

Vectorial analysis, *L2 Physics*

[Teaching in 2021-2022](#), *Université Paris-Est Créteil* (192h)

Calculus 2, *L1 Engineering science*

Function of complex variable and transform, *L2 Engineering science*

Euclidean spaces, *L2 Physics*

Arithmetic and groundings, *L1 Math-Physics and Math-Informatic*

[Teaching in 2020-2021](#), *Université Paris-Est Créteil* (64h)

Function of complex variable and transform, *L2 Engineering science*

Mathematical tools, *L1 Biology*

[Teaching in 2019-2020](#), *Université Paris-Est Créteil* (64h)

Probability, *L2 Informatic*

Arithmetic and groundings, *L1 Mathematics*

[Teaching in 2018-2019](#), *Université Paris-Est Créteil* (30h)

Analysis 1, *L1 Mathematics*

Mathematics for the Physic 3, *L2 Physics*

[Teaching in 2017-2018](#), *Université d'Evry* (96h)

Mathematics 2 (Optimization and linear algebra), *L1 Economical sciences*

Mathematical Language, *L1 Mathematics*

Analysis 2, *L1 Mathematics*

Attended international conferences

- 2021 **Journée du GDR 2021**, *Porquerolles*, France
- 2021 **One world fractals**, *online*
- 2021 **Conference in the honor of J.Schmeling's 60th birthday: New frontiers in dimension theory of dynamical systems - applications in metric number theory**, *online*
- 2019 **Journée du GDR 2019**, *Vielsam*, Belgique
- 2019 **Number Theory and Dynamics**, *Cambridge*, United Kingdom
- 2019 **Thermodynamic Formalism : Modern Techniques in Smooth Ergodic Theory**, *summer school*, CIRM

Spoken Languages

- French - Native speaker
- English - professional

Hobbies

- Cooking
- Chess
- Street theater and Performance

- Guitar