

Timothée Bénard

Curriculum Vitae

Email address : timothee.benard@gmail.com

Publications

Radon stationary measures for a random walk on $\mathbb{T}^d \times \mathbb{R}$.

Submitted in December 2019 (arXiv:2006.05742v1), 74 pages

Drift of random walks on abelian covers of finite volume homogeneous spaces.

Submitted in December 2020 (arXiv:2010.12830v2), 27 pages

Transience of a symmetric random walk in infinite measure.

Submitted in January 2021 (hal-02845403v3), 18 pages

Some asymptotic properties of random walks on homogeneous spaces.

Submitted in April 2021 (arXiv:2104.13181), 30 pages

Invited talks

Arbeitsgemeinschaft 1841: Rigidity of Stationary Measure.

Oberwolfach, October 2018

Ergodic Theory and Dynamical Systems Seminar.

ETH & UZH in Zurich, October 2020

GDR Platon "Paroles aux jeunes chercheurs en systèmes dynamiques et géométries".

Grenobles, December 2020

Seminar "Raconte-moi".

ENS Paris, April 2021

Group actions and Dynamics seminar.

Yale, November 2021

Conferences attended

- 2017-2018 *GDR Platon "Paroles aux jeunes chercheurs en systèmes dynamiques et géométries" (Rennes), Young Geometric and Group Theory VII (Les Diablerets).*
- 2018-2019 *Arbeitsgemeinschaft 1841: Rigidity of Stationary Measure (Oberwolfach), Dynamique d'action de groupes (Cetraro).*
- 2019-2020 *GDR Platon "Paroles aux jeunes chercheurs en systèmes dynamiques et géométries" (Nancy), Winter School on Dynamics: Topology and Numbers (HIM Bonn), Random and Arithmetic Structures in Topology - virtual semester (MSRI Berkley).*

2020-2021 *GDR Platon “Paroles aux jeunes chercheurs en systèmes dynamiques et géométries” (Grenoble), CMI-HIMR Dynamics and Geometry Online Summer School (Bristol).*

Education

2012–2014 *Classes préparatoires*, Lycée Louis-Le-Grand in Paris.

2014 *Admitted at ENS Paris.*

2014–2015 *Bachelor’s degree in Mathematics*, ENS Paris / Sorbonne Université (“Paris 6”).

2015–2016 *Master 1 in Mathematics*, ENS Paris / Sorbonne Université .

2016–2017 *Master 2 in Pure Mathematics*, Sorbonne Université .

2017-2018 *Research internship in homogeneous dynamics*, Université Paris Saclay (“Paris 11”).
directed by Yves Benoist

2018-2020 *Ph.D. on random walks on homogeneous spaces of infinite volume*, Université Paris Saclay.
directed by Yves Benoist, defended in February 2020

2020-202.. *Postdoc at the Department of Pure Mathematics and Mathematical Statistics*, University of Cambridge.
supervised by Péter Varju and Emmanuel Breuillard

Academic responsibilities

2017-2018 *Oral examinations in classe préparatoire.*
Lycée Saint-Louis

2018-2020 *Teaching assistant in Differential Geometry.*
ENS Paris

2020-2021 *Teaching assistant in Algebraic Topology.*
ENS Paris

I have also been the organizer of a study group in Dynamics and Topology at Université Paris Saclay addressing PhD-students and post-docs (2019-2021). I supervised as well a lecture group on Lie Algebra Theory and an undergraduate’s thesis on the Hausdorff dimension of subrings of \mathbb{Q}_p at ENS Paris.

Others

Languages : french, english.