Lucas D'ALIMONTE

Curriculum Vitae

PERSONAL DETAILS

Address	Room 16-26.102, LPSM, campus Pierre et Marie Curie. 4, place Jussieu, 75005 Paris. France.
Mail	`dalimonte@lpsm.paris`
Birthdate	02/04/1998
Citizenship	French
Webpage	`https://perso.lpsm.paris/~dalimonte/`

EDUCATION

Postdoc 2024–2026

LPSM, Sorbonne Université, Paris, France

Hosted by Prof. Piet Lammers, funded by CNRS.

PhD in Mathematics 2020–2024

Université de Fribourg, Fribourg, Switzerland

Under the supervision of Prof. Ioan Manolescu.

Defended on October 7th, 2024, before a committee composed by Prof. Vincent Beffara, Enrico Le Donne, Ioan Manolescu and Yvan Velenik.

Title of the dissertation: *Contributions to the phase separation problem and Ornstein–Zernike theory.*

Masters in Probability 2019–2020

Université Paris-Sud (now Université Paris-Saclay), Orsay, France

Research internship 2019

University of California, Berkeley, USA

5 months research internship under the supervision of Prof. Alan Hammond.

Title of the thesis: *Oriented random walks constrained by area trapping and their link with the KPZ universality class.*

Student of ENS Paris 2017–2020

Ecole Normale Supérieure, Paris, France

Preparatory classes 2015–2017

Lycée Louis le Grand, Paris, France

MPSI/MP. Admission after national examination in ENS Paris.

PREPRINTS AND ARTICLES

[5] *Uniform analyticity of local observables in FK-percolation and analyticity of the Ising spontaneous magnetisation* (Joint with Loïc Gassmann). arXiv:2604.18558, 2026.
[4] *Free energy analyticity of the disordered XY model and Debye screening in the 2D Coulomb gas* (Joint with Piet Lammers). arXiv:2603.28734, 2026.
[3] *Near critical Ornstein–Zernike theory for the planar random cluster model.* (Joint with Ioan Manolescu). Submitted, arXiv:2510.13648, 2025.
[2] *Exact cube-root fluctuations in an area-constrained random walk model.* (Joint with Romain Panis). Submitted, arXiv:2311.12780, 2023.
[1] *Entropic repulsion and scaling limit for a finite number of non-intersecting subcritical FK interfaces.* **Electronic Journal of Probability**, Vol. 29, paper no. 68, 1-53, 2024.

INVITED RESEARCH TALKS

Talks given as an invited speaker at an international conference are highlighted with the symbol ($\star$)

April 2026	Séminaire de probabilités du MAP5, Université Paris-Descartes
March 2026	Conference "Geometric methods in percolation and spin systems", ICTS, Bengaluru, India ($\star$)
January 2026	Séminaire de probabilités, Université d'Aix-Marseille
December 2025	Workshop "Topological phase transition and localization of random fields", CMM, Santiago de Chile ($\star$)
November 2025	Probability seminar, La Sapienza University, Rome
October 2025	LAGA probability seminar, Université Paris Nord
October 2025	SPACE seminar, Institut Denis Poisson, Tours
June 2025	Seed seminar, Institut Henri Poincaré, Paris
January 2025	Winter school on disordered media, Rényi Institute, Budapest
January 2025	Séminaire "Les probas du Vendredi", Sorbonne Université, Paris
July 2024	Probability seminar, Institut Fourier, Grenoble
April 2024	Mathematical Physics seminar, University of Geneva
December 2023	Probability and Analysis seminar, IHES, Paris
August 2023	Percolation and interactions workshop, CIRM ($\star$)
March 2023	Bern-Fribourg graduate seminar
February 2023	Workshop on Mathematical physics, Les Diablerets ($\star$)
July 2022	Saint-Flour probability summer school
May 2022	Mathematical Physics seminar, University of Geneva
March 2022	Bern-Fribourg graduate seminar

SCIENTIFIC ACTIVITES

Reviewer for: Annals of Probability, Electronic Communications in Probability, Journal of Statistical Physics.

TEACHING ACTIVITIES

Teaching assistant at the university of Fribourg 2020–2024

Full teaching load, corresponding to 96 hours/year. In charge of the exercises sessions for the following courses:

- Linear Algebra I and II (first year course)
- Algebra and Geometry I and II (second year course)
- Introduction to probability theory and statistics (second year course)

TA of the course "ntroduction à la statistique" 2018
Université Paris 1 Panthéon-Sorbonne
TA for a course of the Bachelor of economics of Paris 1

Volunteer teaching in a non-profit organization 2017–2018
Association TalENS, Paris
Mathematics and Physics courses to High School students with an underprivileged background.

"Colleur" (oral examinator) 2017-2019
Lycée Louis le Grand preparatory classes
MPSI class

ORGANIZATIONNAL RESPONSIBILITIES

2023 Co-organizer of the CUSO graduate colloquium (seminar gathering PhD students of Western Switzerland)

2022– Founder and organizer of the Young Swiss Probabilist Meeting (semiannual gathering between PhD and Post-Doctoral students in probability-related fields, with talks and informal discussions)

VISITS AND INVITATIONS

November 2023 Short-term (1 week) visit in LPSM, Paris. Invited by Prof. Piet Lammers