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Born on July 9, 1983  
French nationality

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## Employment

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2008 – present    **Instructor** Courant Institute of Mathematical Sciences, New York University  
**PIRE Fellow** Visiting researcher at Université de Genève (January – July 2009)

## Education

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2005 – 2008    **PhD in Probability under the supervision of Prof. Wendelin Werner**  
*mention Très Honorable (summa cum laude)* ENS and Université Paris-Sud 11

2004 – 2005    **DEA de Probabilités (MSc)** *mention Très Bien (summa cum laude)* Université Paris-Sud 11  
**Master Thesis under the supervision of Prof. Wendelin Werner**

2003 – 2004    **Agrégation de Mathématiques** (*ranked 22nd*)  
**DEA de Probabilités (MSc)** (*partially*) Université Paris 6

2002 – 2003    **Maîtrise de Mathématiques (BSc)** *mention Très Bien* ENS  
**Licence de Mathématiques** *mention Très Bien* ENS

2002 – 2006    **Student at École Normale Supérieure (Paris)**

May – July 2002 **Competitive exams to enter French “Grandes Écoles”**  
**Admitted to École Normale Supérieure** (*ranked 5th*)  
**and to École Polytechnique** (*ranked 4th*)

2000 – 2002    **Preparatory classes for “Grandes Écoles”** Lycée Hoche (Versailles)

June 2000    **Baccalauréat (A-levels)** Lycée Hoche (Versailles)

## Awards and honors

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July 2010    **NSF Research Grant DMS-1007626 (PI), 2010–2013**

March 2009    **Prix de thèse Jacques Neveu 2008**

July 2000    **International Mathematical Olympiad** *Bronze Medal* Taejon, South Korea

June 2000    **Concours Général de Mathématiques (French Mathematical Olympiad)** (*ranked 4th*)

## Publications

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A percolation process on the square lattice where large finite clusters are frozen (with J. van den Berg and B. de Lima), submitted.

Connection probabilities and RSW-type bounds for the FK Ising model (with H. Duminil-Copin and C. Hongler), submitted.

SLE(6) and the geometry of diffusion fronts, submitted.

Inhomogeneity and universality: off-critical behavior of interfaces, submitted.

On monochromatic arm exponents for 2D critical percolation (with V. Beffara), *Annals of Probability*, to appear.

Near-critical percolation in two dimensions, *Electronic Journal of Probability* **13**, 1562–1623 (2008).

Asymmetry of near-critical percolation interfaces (with W. Werner), *Journal of the American Mathematical Society* **22**, 797–819 (2009).

Large scale properties of the IIC for 2D percolation (with L. Chayes), *Stochastic Processes and their Applications* **119**, 882–896 (2009).

Critical exponents of planar gradient percolation, *Annals of Probability* **36**, 1748–1776 (2008).

## Teaching experience

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2008 – present	<b>Instructor</b>	New York University	“Quantitative Reasoning: Elementary Statistics” (Fall 2008), “Discrete Mathematics” (Fall 2009), “Functions of a Complex Variable” (Spring 2010), “Analysis 1” (Fall 2010), “Advanced Topics in Probability (Conformal Methods in 2D Statistical Mechanics)” (Fall 2010)
April 2008	<b>T.A. for Wendelin Werner’s course</b>	IMPA, Rio de Janeiro	
July 2007	<b>T.A. for Wendelin Werner’s course</b>	IAS / PCMI 2007, Graduate Summer School	
2006 – 2008	<b>Course of mathematics for third-year economics students (1st year at ENS): probability and statistics (course &amp; exercise sessions)</b>	ENS	

## Selected Talks

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- 2010      January: *Probability seminar* (Vrije Universiteit, Amsterdam), *Probability seminar* (Courant Institute) – February: *Probability seminar* (University of Minnesota) – March: *Mathematical physics seminar* (Université de Genève) – April: *Seminar on stochastic processes* (ETH / Universität Zürich) – July: *CMI 2010 Summer School* (Buzios, Brazil) – August: *ICM Satellite Conference on Probability and Stochastic Processes* (ISI, Bangalore), *Journée Jacques Neveu* (Université Bordeaux 1) – September: *SPA Osaka 2010* (Osaka)
- 2009      January: *Conference “Potential Theory and Analysis of Growth Processes”* (Université d’Orléans) – February: *Condensed matter physics seminar* (École Polytechnique) – March: *Workshop “Random Structures, Growth Processes and Conformal Methods”* (University of Helsinki) – June: *Spatial stochasticity seminar* (CWI, Amsterdam) – August: *Workshop “Scaling Limits in Models of Statistical Mechanics”* (MFO, Oberwolfach) – September: *Conference “Conformal Structures and Dynamics”* (MRCC, Bedlewo)
- 2008      April: *Colóquio Inter-Institucional “Modelos Estocásticos e Aplicações”* (IMPA, Rio de Janeiro) – June: *Canada-France Congress 2008* (UQAM, Montréal), *La Pietra Week in Probability 2008* (Florence) – August: *Workshop “Stochastic Loewner Evolution and Scaling Limits”* (CRM, Montréal) – October: *Probability seminar* (Courant Institute) – December: *Probability seminar* (University of Toronto), *Probability seminar* (Columbia University), *Random Shapes Reunion Conference* (IPAM, UCLA)
- 2007      January: *Condensed matter physics seminar* (École Polytechnique) – February: *Probability seminar* (Université d’Orléans) – March: *Junior seminar* (IPAM, UCLA) – June: *Congrès SMAI 2007* (Praz-sur-Arly) – July: *IAS / PCMI 2007* (Park City) – October: *Arbeitsgemeinschaft: Percolation* (MFO, Oberwolfach), *Probability seminar* (Weizmann Institute) – December: *Probability seminar* (ENS Lyon)
- 2006      June: *Probability seminar* (Vrije Universiteit, Amsterdam) – October: *Probability seminar* (Université Paris-Sud 11, Orsay), *Spatial stochasticity seminar* (CWI, Amsterdam)