# Yichao HUANG

PhD, junior researcher in Mathematics

#### **Personal Information**

Birth April 3, 1991; People's Republic of China Office Exactum C327, Kumpula Campus

Address P.O. Box 68 (Gustaf Hällströmin katu 2b), University of Helsinki, Finland

Contact yichao.huang@helsinki.fi

# **Current Employment**

Since 2018

Post-doctoral researcher at University of Helsinki, Finland.

Supervisors: Antti Kupiainen and Eero Saksman under the ERC-grant QFPROBA.

#### **Education**

2014 - 17

PhD student at University Paris VI and DMA of École Normale Supérieure de Paris.

Supervisors: **Rémi Rhodes** and **Vincent Vargas**.

PhD thesis in probability on *Gaussian Multiplicative Chaos* and *Liouville Quantum Gravity*. Defended in Nov 2017 at DMA/ENS. Referees: Nathanaël Berestycki, Christophe Garban. Jury: J. Barral, N. Curien, C. Garban, A. Kupiainen, R. Rhodes, E. Saksman, Z. Shi, V. Vargas.

2010 – 14 **Élève normalien at École Normale Supérieure de Paris.** 

FIMFA cursus of École Normale Supérieure de Paris. ENS Paris Diploma. Master "Probabilités et modèles aléatoires" at University Paris VI, grade "Très Bien". Thesis on *critical Gaussian Multiplicative Chaos*. Supervisors: Rémi Rhodes, Vincent Vargas.

2008 – 10 | Preparatory Classes MPSI–MP\*, Lycée Janson de Sailly.

Admitted to École Normale Supérieure de Paris through French national entrance exam.

## **Publications et preprints**

- [2] Two perspectives of the 2D unit area quantum sphere and their equivalence with Juhan Aru and Xin Sun, Communications in Mathematical Physics
- [1] Liouville Quantum Gravity on the unit disk with Rémi Rhodes and Vincent Vargas, Annales de l'Institut Henri Poincaré (B)

#### Conference talks

2018	SPA (Conference on	Stochastic Processe	s and their App	olications), <b>G</b>	othenburg, Sweden
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2017 Conference "Fractal geometry and dynamics", Institut Mittag-Leffler, Sweden

Conference "Les Probabilités de Demain", **Institut des Hautes Études Scientifiques, France**Colloquium "Jeunes Probabilistes et Statisticiens", **École de Physique des Houches, France** 

2013 Conference "Des probas de la rue d'Ulm", **École Normale Supérieure de Paris, France** 

## Seminar talks

2017	Conterence of N	Aathematical Physi	cs group, <b>Univ</b>	versity of Hel	lsinki, Finland
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Conference of Probability/Statistics team, **École Normale Supérieure de Paris, France**PhD/Postdoc seminar of ENS Paris, **École Normale Supérieure de Paris, France** 

2015 PhD/Postdoc seminar of University Paris XII, Université Paris-Est, France

#### Research visits

Sep 2017 – Dec 2017 Institut Mittag-Leffler, Sweden

IML postdoctoral fellowship grant

Apr 2015 Isaac Newton Institute, UK

Cambridge-PSL French embassy fund

## Other conference participations

- 2018 Scaling limits, rough paths, quantum field theory, Isaac Newton Institute, UK
- 2017 Mini-school on Random Maps and the Gaussian Free Field, ENS Lyon, France
- Disordered systems, random spatial processes and applications, **Institut Henri Poincaré, France**Random geometry, **Isaac Newton Institute, UK**
- School and Workshop on Random Interacting Systems, **University of Bath, UK**Probability Summer School in Saint-Flour, **Saint-Flour, France**

# **Teaching**

2014 – 17 TA, undergraduate level (192 hours)

Sequences, Integrals and Linear Algebra (Maths) Analysis and Algebra for Scientific Studies (Maths)

Oscillatory Reactions (Chemistry)

Arithmetic and Cryptography (Computer Science)

2011 – 12 | Oral examinator in Preparatory Classes (60 hours)

Lycée Janson de Sailly, Paris

#### Administrative activities

2013 – 17 **Nominated member of the advisory committee of the laboratory**, DMA, ENS Paris **(Co)-Supervision of undergraduate thesis** 

## Scientific vulgarisation

Jury member of  $\mathbb{TFJM}^2$  (Tournoi français des jeunes mathématiciennes et mathématiciens)  $\mathbb{TFJM}^2$ : team competition by high school students who work several months on open questions

2010 - 11 | Tutor of six high school students, TalENS association

## Languages

Chinese NativeEnglish FluentFrench FluentFinnish Noob

### Personal activities

Piano | **Student of Éric Vidonne**, Hector Berlioz conservatory (CMA10) in Paris (2013–2017).

Concours international des amateurs à l'X (2015): first prize, audience award (Mozart K.450). (Co-)organiser of the classical music club of the ENS since 2013: one free concert per month. Invitation of international pianist: organisation of a free concert proposed by Valentina Lisitsa.

Sports | Basketball/volleyball team at the ENS; organisation of several tournaments in Paris (TRU).