

RONAN MEMIN

PERSONNAL DATA

Birth date: 26 Sept. 1995

Birth place: Rennes, France

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note: the dates are written in the format mm/dd/yyyy

EDUCATION AND DIPLOMAS

Post doctoral position, « Junior research chair in statistical physics »

ENS, Paris, funded by PSL university

2025-2028

Post doctoral position with Michel Pain

IMT, Toulouse, funded by the Labex CIMI

2023-2025

PDH thesis under the supervision of Alice Guionnet, « Analyse de certains modèles intégrables grâce aux matrices aléatoires/Analysis of some integrable models thanks to random matrices »

ENS Lyon

2019-2023

Research Master in probability, internship under the supervision of Alice Guionnet

ENS Rennes – Université de Rennes 1

2018-2019

Mathematics Agrégation

Normalien at ENS Rennes

2017-2018

L3-M2 (undergraduate studies)

Normalien at ENS Rennes

2015-2019

MPSI, MP* (preparatory class for scientific studies)

Lycée Rabelais, St Brieuc 2013-2014

Lycée Chateaubriand, Rennes 2014-2015

PUBLICATIONS and PREPRINTS

[6] **CLT for beta-ensembles with Freud weights application to the KLS conjecture in Schatten balls**, with Charlie Dworaczek Guera and Michel Pain, [arXiv preprint](#)

[5] **Large deviations at the edge for 1D gases and tridiagonal random matrices at high temperature**, with Charlie Dworaczek Guera, [arXiv preprint](#)

[4] **CLT for real beta-ensembles at high temperature**, with Charlie Dworaczek Guera, Electronic Journal of Probability, 29: 1-45, 2024

[3] **CLT for beta ensembles at high temperature, and for integrable systems : a transfer operator approach**, with Guido Mazzuca, Annales Henri Poincaré 2024 p. 1-72

[2] **Large deviations for Ablowitz-Ladik lattice, and the Schur Flow**, with Guido Mazzuca, Electronic Journal of Probability, 28: 1-29, 2023

[1] **Large deviations for generalized Gibbs ensembles of the classical Toda chain**, with Alice Guionnet, Electronic Journal of Probability, 27: 1-29, 2022

PhD THESIS

Analysis of certain integrable models via random matrix theory, under the supervision of Alice Guionnet, defended on the 09/22/2023 (<https://theses.hal.science/THESES-ENS-LYON/tel-04236939v1>).

TEACHING

Teaching assistant, advanced probability, M1

ENS Lyon, course given by Grégory Miermont
2019-2020 (24h) and 2020-2021 (24h)

Teaching assistant, analysis and PDEs, L3

ENS Lyon, course given by Eric Dumas
2019-2021 (24h) and 2020-2021 (24h)

Interventions in preparation for mathematics agregation, M2

ENS Lyon
2019-2020 (16h), 2020-2021 (16h), 2021-2022 (16h) and 2022-2023 (3h)

ORGANIZATION OF EVENTS

Co organization of the conference « Exact hydrodynamics of integrable systems: mathematics and physics »

March 9, 10 2026

<https://www.ceremade.dauphine.fr/fr/actualites/exact-hydrodynamics-of-integrable-systems-mathematics-and-physics.html>

CONFERENCES

Integrability, random matrices, and all that

From 06/02/2025 to 06/06/2025

ENS Lyon, Lyon, France

Algebraic aspects of random matrices

From 10/07/2024 to 10/11/2024

CIRM, Marseille, France

Random matrices and free probability

From 06/19/2024 to 06/21/2024

IMT, Toulouse, France

The multiple facets of the six-vertex model

From 10/31/2022 to 11/04/2022

ENS Lyon, Lyon, France

GDR MEGA autumn School

From 10/10/2022 to 10/14/2022

Aussois, France

Mini-school on Universality in mathematical physics: random geometries, field theories and hydrodynamics

From 09/26/2022 to 09/30/2022

ENS Lyon, Lyon, France

50th Probability Summer School

From 07/11/2022 to 07/23/2022

Saint Flour, France

Workshop Randomness, Integrability and Universality

From 04/26/2022 to 04/29/2022

GGI Institute, Florence, Italy

School and Workshop on Random Matrix Theory and Point Processes

From 09/23/2019 to 09/27/2019

ICTP, Trieste, Italy

TALKS

Introduction to the Toda chain and its Lax matrix

03/25/26, Entropy and random matrices, CIRM, Marseille

Beta-ensembles,

12/01/25, Informal seminar of DMA, ENS, Paris

CLT for the Lax matrix of some integrable systems, and for high temperature beta ensembles,

06/06/25, Integrability, random matrices and all that, ENS Lyon, Lyon

CLT for the Lax matrix of some integrable systems, and for high temperature beta ensembles,

10/08/24, Algebraic aspects of random matrices, CIRM, Marseille

CLT for the Lax matrix of some integrable systems, and for high temperature beta ensembles,

02/09/24, MEGA seminar, IMT, Toulouse

Analysis of certain integrable models via random matrix theory,

10/17/23, probability seminar, IMT, Toulouse

PhD defense : Analysis of certain integrable models via random matrix theory,

22/09/23, PhD defense, ENS Lyon, Lyon

CLT for beta ensembles at high temperature, and for integrable systems,

03/31/23, probability working group, Université de Lille

CLT for beta ensembles at high temperature, and for integrable systems,

03/23/23, random matrices working group, ENS Lyon, Lyon

Large deviations for Gibbs ensembles of the classical Toda Chain,

11/29/22, at the probability seminar, CMI, Marseille

Nonasymptotic random matrix theory,

11/24/22, at the working group of probability, ENS Lyon, Lyon

The working group focused on the mini course given by Ramon Van Handel at the 50th summer school of St Flour

Large deviations for Gibbs ensembles of the classical Toda Chain,

11/10/22, at the GDR MEGA autumn school, Aussois

Large deviations for Gibbs ensembles of the classical Toda Chain,

04/28/22, at the Workshop Randomness, Integrability and Universality at Galileo Galilei Institute, Florence

Grandes déviations et convergence de la mesure empirique pour un modèle de matrices tridiagonales aléatoires

03/11/21, PHD students seminar, Rennes

arXiv:2103.04858

Almost-additivity of the free energy and estimation for uniform densities

03/05/21, working group large deviations and random matrices, ENS Lyon, Lyon

The working group focused for several weeks on a series of articles by Sylvia Serfaty and collaborators. We presented some aspects of an article by Serfaty and Armstrong.

arXiv:1906.09848v2