# Colin Jahel

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### Academic studies

PhD. 2018–june 2021 (expected)

Université Paris Diderot then Université Claude Bernard Lyon 1.

Advisors: Lionel Nguyen Van Thé and Todor Tsankov

Research internship. 2017–2018

Advisor: Todor Tsankov, Université Paris Diderot.

Graduate education - Master 2: Probabilities and Applications. 2016–2017

Sorbonne Université, speciality "Probabilities and Random Models".

Bachelor (Licence 3) then Graduate education (first year - Master 1). 2014–2016

ENS de Lyon.

## Preprints and publications

Invariant measures on products and on the space of linear orders, Arxiv.

Colin Jahel and Todor Tsankov, submitted.

Minimal model-universal flows for locally compact Polish groups, Arxiv.

Colin Jahel and Andy Zucker, accepted at Israel J. Math..

Extending partial automorphisms of n-partite tournaments, Arxiv.

Jan Hubička, Matěj Konečný, Colin Jahel and Marcin Sabok, Eurocomb 2019.

Unique ergodicity of te automorphism group of the semigeneric directed graph, Arxiv.

Colin Jahel, accepted at Ergodic Theory and Dynamical Systems.

Topological dynamics of Polish group extensions, Arxiv.

Colin Jahel and Andy Zucker, submitted.

### **Talks**

Some progress on the unique ergodicity problem.

Dresden (online). March 2021

Percolation et groupes.

Montpelier, Grad student seminar (oline).

March 2021

Actions of automorphism groups of Fraïssé limits on the space of linear orderings.

Montréal (online).
 Vienna (online).
 October 2020

- St Petersburg (online).

August 2020

Caltech Logic seminar (online).
Lyon-Paris Logic seminar (online).
July 2020
June 2020

- Work seminar Actions !. January 2020

Lyons-Schramm indistinguishability Theorem.

ENS Lyon, Work seminar Actions! (online). April 2020

Measuring model-theoric spaces.

ENS Lyon, Grad Students Seminar. November 2019

Dynamics and model-theoretics structures.

Université Paris Diderot, Grad Students Seminar. March 2019

Unique ergodicity, the semigeneric directed graph and short exact sequences.

Banff, Unifying Ramsey Theory. November 2018

Nash-Williams criterion for random walks.

Université Paris Diderot, Ergodic theory work group.

October 2018

There is a uniqueness phase for the percolation on Cayley graphs.

Université Paris Diderot, Ergodic theory work seminar.

March 2018

Percolation on Caley graphs.

## Research schools and conferences

Invariant Measures (invited speaker), St Petersburg.

Kervaire Seminar, Les Diablerets, Switzerland.

Measurable, Borel and Topological Dynamics, Marseille.

Ecole d'été GRaphes et Arbres ALéatoires, Marseille.

July 2019

Meeting ANR GAMME, Saint-Etienne de Tinée, France.

Unifying Themes in Ramsey Theory (invited speaker), Banff, Canada.

Thematic semester: Descriptive set theory and Polish groups, Lausanne. February and March 2018

-Borel combinatorics and ergodic theory conference

-Structure and dynamics of Polish groups conference.

Thematic semester: Groups, Graphs and Dynamics, Lyon. November 2017 and January 2018

- -Ultrafilters, Ramsey Theory and Dynamics
- -Entropy and Sophicity (school)
- -Graph limits (school).

## Teaching (recitation sessions)

Advanced Probabilities Institute for Financial and Acturial Studies.	Spring 2021
Measure Theory Institute for Financial and Acturial Studies.	Fall 2020
Advanced Probabilities Institute for Financial and Acturial Studies.	Spring 2020
Measure Theory Institute for Financial and Acturial Studies.	Fall 2019
Probability Université Paris Diderot.	Spring 2019
Mathematics for Biologists Université Paris Diderot.	Fall 2018

## Short research internships

 $S_{\infty}$ -invariant measures supported on a countable structure .

Advisor: Todor Tsankov, Université Paris Diderot. Fall and Summer 2017

Random Walks Generating Graphs.

Advisor : Agelos Georgakopoulos, University of Warwick. Summer 2016

Unique ergodicity of the automorphism group of the random graph.

Advisor : Lionel Nguyen Van Thé, Université d'Aix-Marseille. Summer 2015

### Administrative activities

Organization of a meeting between master and PhD students.

Université Claude Bernard Lyon 1. February 2020

Organization of a meeting between master and PhD students.

Université Paris Diderot. April 2019

Member of the doctoral office.

Université Paris Diderot. 2018–2019

Elected member of the Administration council.

ENS de Lyon. 2015–2016

Elected member of the students association.

ENS de Lyon. 2015–2016

Elected member of the council for students' life and welfare.

ENS de Lyon. 2014–2015