

# Octave Lacourte

## Curriculum Vitae

Institut Camille Jordan,  
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### Education

- 2018-Present **Ph.D. Thesis**, *Invariants of some groups with dynamical origin*, Under the supervision of Yves Cornulier, ICJ Lyon (France).
- 2017-2018 **Master Degree**, *Fundamental Mathematics*, ENS Rennes and Université de Rennes 1 (France).
- 2017 **Agrégation externe de Mathématiques**, French degree for teaching.
- 2016-2017 **Master Degree**, *Teaching in mathematics*, ENS Rennes and Université de Rennes 1 (France).
- 2015-2016 **Master Degree (first year)**, *Mathematics and Applications*, ENS Rennes and Université de Rennes 1 (France).
- 2014-2015 **Bachelor in Mathematics**, ENS Rennes and Université de Rennes 1.
- 2012-2014 **Undergraduate studies to prepare for nationwide competitive examinations**, Classe Préparatoires aux Grandes Ecoles (CPGE), Lycée du Parc - Lyon (France).

### Career

- 2018-Present **Teaching Assistant**, Université de Lyon 1 (France).
- January **Member of the Parity Commission of the Institut Camille Jordan.**
- 2020-Present
- Fall **PhD representative to the head of the Institut Camille Jordan.**
- 2018-Spring  
2020

### Publications

**Abelianization for some groups of intervals exchanges**, *soumis*, preprint, arXiv:2009.07595.

Let IET be the group of Interval Exchange Transformations and  $\text{IET}^\infty$  the group of Interval Exchange Transformations with flips. In this article we identify the abelianization of every subgroup  $\text{IET}(\Gamma)$  and  $\text{IET}^\infty(\Gamma)$  for every subgroup  $\Gamma$  of  $\mathbb{R}$ .

**Signature for piecewise continuous groups**, *soumis*, preprint, arXiv:2002.12851.

Construction of a group homomorphism which extends the classical signature homomorphism on the group of bijections of  $[0, 1[$  which are continuous outside a finite set and its link with the Kapoudjian class.

### Talks

- 27/05/20 **Workgroup Action!**, ENS Lyon (France).  
Extension of the signature on some subgroups of  $\mathfrak{S}([0, 1])$
- 06/03/20 **Séminaire des Doctorants et Doctorantes de l'Université d'Angers**, Angers (France).  
Research for an extension for the signature

- 03/03/20 **Séminaire des Doctorants et Doctorantes de l'Université de Nantes**, *Nantes (France)*.  
Research for an extension for the signature
- 02/03/20 **Séminaire Pampers de l'Université Rennes 1**, *Rennes (France)*.  
Research for an extension for the signature
- 28-30/10/19 **Rencontres Doctorales Lebesgue 2019**, *Nantes (France)*.  
Introduction to the group IET
- 11/06/19 **Workgroup Action!**, *ENS Lyon (France)*.  
Abelianization of the group IET and some of its subgroups
- 20-24/05/19 **Colloque Inter'Actions 19**, *Bordeaux (France)*.  
Introduction to the group IET
- 04/02/19 **Séminaire des Doctorants et Doctorantes de l'ICJ et de l'UMPA**, *Université Lyon 1 (France)*.  
The group IET and its abelianization

## Conferences attended

- 24-28/02/20 **YGGT 2020**, *Saint-Jacut-de-la-Mer*.  
<https://ygg2020.sciencesconf.org/>
- 28-30/10/19 **Rencontres Doctorales Lebesgue 2019**, *Nantes*.  
<https://www.lebesgue.fr/fr/content/seminars-rdl2019>
- 07-11/10/19 **Measurable, Borel, and Topological Dynamics**, *CIRM Marseille*.  
<https://conferences.cirm-math.fr/2080.html>
- 05-10/08/19 **Young Mathematicians in C\*-Algebras Conference 2019**, *University of Copenhagen*.
- 21-25/01/19 **Master Class "Groupes et Géométries"**, *CIRM, Marseille*.  
<https://conferences.cirm-math.fr/1920.html>
- 19-21/11/18 **Paroles aux jeunes chercheurs 2018: groupes et géométrie**, *Lyon*.  
<https://adrienleboudec.perso.math.cnrs.fr/platon/Lyon2018.html>
- 14-18/05/18 **Colloque Inter'Actions 18**, *Lyon*.  
<https://interactions18.sciencesconf.org/>

## Teaching Experience

- Fall 2020 **Khôlles (weekly oral examinations), Mathematics 1st year**, Université Claude Bernard Lyon 1, Prépa PMI, 24hrs.
- Fall 2020 **Teaching assistant Basics in Mathematics 1st year**, Université Claude Bernard Lyon 1, 24hrs.
- Spring 2020 **Khôlles (weekly oral examinations), Mathematics 1st year**, Université Claude Bernard Lyon 1, Prépa PMI, 16hrs.
- Fall 2019 **Teaching assistant Basics in Mathematics 1st year**, Université Claude Bernard Lyon 1, 64hrs.
- Fall 2018 **Teaching assistant Basics in Mathematics 1st year**, Université Claude Bernard Lyon 1, 64hrs.

## Languages

- Français native
- Anglais Fluent
- Computing SAGE,  $\LaTeX$