### Michaël Lalancette

### Ph.D. Candidate, Department of Statistical Sciences, University of Toronto

Toronto, Canada | lalancette@utstat.toronto.edu | mic-lalancette.github.io

### Education

Ph.D. in Statistics | 09/2017 - | University of Toronto

- GPA: 4.0/4.0
- Supervisor: Prof. Stanislav Volgushev

M.Sc. in Statistics | 09/2015 – 08/2017 | Université de Montréal

- GPA: 4.275/4.3
- Thesis: Convergence of a Random Walk Metropolis Algorithm for Bimodal Target Distributions
- Supervisor: Prof. Mylène Bédard

B.Sc. in Mathematics | 09/2012 - 05/2015 | Université de Montréal

- GPA: 3.69/4.3 (Award of academic excellence)

### **Publications**

Lalancette, M., Engelke, S. and Volgushev, S. (2020+). "Rank-based Estimation under Asymptotic Dependence and Independence, with Applications to Spatial Extremes." To appear in *Annals of Statistics*. (arXiv)

## Talks and presentations

Invited seminar at the Department of Mathematics | Technical University of Munich | 11/2021

- Title: The extremal graphical lasso

Invited seminar at the Institute of Statistics, Biostatistics and Actuarial Sciences | Université Catholique de Louvain | 10/2021

- Title: The extremal graphical lasso

Invited talk at the 12th International Conference on Extreme Value Analysis  $\mid$  University of Edinburgh  $\mid$  07/2021

- Title: Concentration and asymptotic normality of the empirical variogram, with application to structure learning

Contributed talk at the 2021 Annual Meeting of the SSC | Online | 06/2021

- Title: Rank-Based Estimation Under Asymptotic Dependence and Independence, with Applications to Spatial Extremes

Contributed talk at Statistics Graduate Student Research Day | Fields Institute, Toronto | 04/2021

- Title: Rank-Based Estimation Under Asymptotic Dependence and Independence, with Applications to Spatial Extremes

Invited talk at Symposium Annuel en Mathématiques pour un Avenir en Recherche et en Industrie  $(SAMARI) \mid Université de Montréal \mid 03/2021$ 

- Title: La Théorie des Valeurs Extrêmes

Contributed talk at the 11th International Conference on Extreme Value Analysis | University of Zagreb | 07/2019

- Title: Rank-based M-estimation for Tail Dependence and Independence

## Poster presentation at Statistics Graduate Student Research Day | Fields Institute, Toronto | 04/2019

- Title: Rank-based M-estimation for Tail Dependence and Independence

#### Contributed talk at the 2018 Annual Meeting of the SSC | McGill University | 06/2018

- Title: Convergence of a Random Walk Metropolis Algorithm for Bimodal Target Distribution

#### Talk at Clubmath | Université de Montréal | 11/2016

- Title: A priori information and Bayesian Statistics

#### Talk at Graduate Student's Seminar | Université de Montréal | 10/2016

- Title: Optimal scaling of the Random Walk Metropolis algorithm

## Scholarships and awards

Arts & Science Doctoral Excellence Scholarship | University of Toronto | 06/2021

- Worth: 5000\$

# Postgraduate Scholarship - Doctoral | Natural Sciences and Engineering Research Council of Canada | 09/2019 - 08/2021

- Worth: 42 000\$

- Declined

#### Probability Section Student Research Presentation Award | Statistical Society of Canada | 06/2018

- Worth: 500\$

- Awarded for the best student research presentation in the field of probability given at the 2018 SSC annual meeting

# Statistics Graduate Fellowship Award | Department of Statistical Sciences, University of Toronto | 10/2017, 11/2018

- Worth: 1500\$/year (2 years)

Ontario Graduate Scholarships | Government of Ontario | 09/2017 - 08/2018, 09/2018 - 08/2019, 09/2019 - 08/2020, 09/2020 - 08/2021

- Worth: 15 000\$/year (4 years)

## Doctoral Scholarship | Fonds de Recherche du Québec - Nature et Technologies | 09/2017 - 08/2020

- Worth: 60 000\$

# Bourse FESP de fin d'année | Département de Mathématiques et de Statistique, Université de Montréal | 02/2016, 04/2017

- Worth: 1000\$ (2016) and 2430\$ (2017)

## Teaching experience

#### Instructor | University of Toronto | 05/2019 - 06/2019

- STA247 (Probability with Computer Applications)

### Teaching Assistant | University of Toronto | 09/2018 - 04/2019

- STA490 (Statistical Consultation, Communication, and Collaboration)

#### Instructor | Université de Montréal | 01/2017 - 04/2017

- STT2100/STT6115 (Bayesian Decision Theory, Cross-listed graduate and undergraduate course)

#### Teaching Assistant | Université de Montréal | 01/2015 - 12/2016

- STT2000 (Survey Sampling Theory)
- MAT1978 (Probability and Statistics for Scientists and Engineers)
- STT3700 (Statistical Inference)
- STT1700 (Introduction to Statistics)
- MAT2717 (Stochastic Processes)
- STT1901 (Statistics for Social Scientists)

## Service and leadership

#### Peer review work

- I have served as a reviewer for the Journal of Computational and Graphical Statistics and for Extremes.

#### President | Statistics Graduate Students' Union | University of Toronto | 09/2018 - 08/2019

- Responsibilities include supervising all of the executive committee's activities.

## Chair | Organizing committee, Statistics Graduate Student Research Day | Fields Institute, Toronto | 10/2018 - 04/2019

- Responsibilities included inviting speakers, securing space and funding, managing most of the local arrangements, supervising and animating the event.
- More information about the event on the webpage.

# Committee Member | Association of Graduate Students in Mathematics and Statistics | Université de Montréal | 11/2016 - 08/2017

- I was in charge of organizing meetings and social activities for graduate students.

#### Volunteer | Canadian Undergraduate Mathematics Conference, Montréal | 20/07/2017

- I was invited to share my experience and knowledge about graduate studies in mathematics and statistics at Université de Montréal.

#### Volunteer | Congrès MATh.en.JEANS 2017, Montréal | 30/03/2017 - 31/03/2017

- I was invited to assist students of middle school and high school levels in solving, and presenting their solutions to, university level mathematics problems.

#### Volunteer | 2016 School Fair, Université de Montréal | 06/11/2016

- I represented the Département de Mathématiques et de Statistique.

## Computer knowledge

Programming languages: C, C++, html/css, markdown

Statistical and mathematical softwares: R, SAS, SPSS, MATLAB, Mathematica

Other softwares: LATEX, Microsoft Office

#### Personnal information

Language skills: French and English (fluent), German (introductory)

Citizenship: Canadian

Last updated on: October 18, 2021