LAMBERT DE MONTE

L.DEMONTE@ED.AC.UK

EDUCATION

University of Edinburgh, Edinburgh, United Kingdom

Sep. 2022 -

PhD Statistics

Supervisors: Dr. Ioannis Papastathopoulos, Prof. Gabriele C. Hegerl

King Abdullah University of Science and Technology, Thuwal, Saudi Arabia

Feb. 2024 – May 2024

Visiting PhD student

Supervisor: Prof. Raphaël Huser

McGill University, Montréal, Canada

Sep. 2020 – June 2022

MSc Mathematics and Statistics Supervisor: Prof. Christian Genest

McGill University, Montréal, Canada

Sep. 2017 – May 2020

BSc Mathematics and Computer Science

RESEARCH INTERESTS

- Extreme value theory, Multivariate and spatial statistics, Graphical modelling

- Probabilistic forecasting
- Environmental applications in the context of climate change.

PUBLICATIONS

- Papastathopoulos, I., De Monte, L., Campbell, R., and Rue, H. (2023) *Statistical inference for radially-stable generalized pareto distributions and return level-sets in geometric extremes*, arXiv preprint.
- Genest, C. and De Monte, L. (2021) À la recherche de la Rondurie, Accromath, Volume 16 p.24-29.

SOFTWARE

- R package geometricExtremes: Creator and maintainer. Based on Papastathopoulos et al. (2023).

PRESENTATIONS AND POSTER SESSIONS

- 15th International Meeting on Statistical Climatology (contributed presentation): *Flood risk modelling using geomet*ric extreme value theory.
- CfS Annual Conference 2024 (contributed poster): Multivariate radial Pareto distributions: a geometric approach to the statistical modelling of multivariate extremes.

 Jun. 2024
- CMStatistics (invited presentation): Bayesian inference for radially-stable distributions. Dec. 2023
- Séminaires de sciences de la décision HEC Montréal (invited presentation): *Multivariate extremes A geometric Bayesian inference approach.*Sep. 2023
- 13th International Conference on Extreme Value Analysis (contributed poster): *Bayesian approach to geometric inference for multivariate extremes.*Jun. 2023
- BIRS-IMAG Modern Statistical and Machine Learning Approaches for High-Dimensional Compound Spatial Extremes (invited short presentation): *Geometric inference for Hüsler–Reiss random vectors*. May 2023

AWARDS

School of Mathematics, University of Edinburgh

Sep. 2023

- Full PhD Studentship: £23,000 tuition and £16,000 stipend per year

Mitacs Canada Jan. 2022

- Funding for research on extreme value modeling in partnership with Hydro-Québec. \$30,000 (CAD)

WORK EXPERIENCE

Hydro-Québec Research Institute (IREQ)

Jan. 2022 - Aug. 2022

- Research partnership to develop methods for the statistical post-treatment of weather forecasts, specifically of extreme meteorological events.

DataHub, National Bank of Canada

May 2019 - Sept. 2020

- Development and automation of the official DataHub credit card data base.
- Statistical modeling of credit card use and behaviors.

RELEVENT EXPERIENCE

Teaching Assistantships (University of Edinburgh)

Tutoring workshops. Marking of assignments and examinations. List of courses:

- MATH11176 – Extended Statistical Programming	Sep. 2023 – Dec. 2023
- MATH11187 – Generalised Regression Models	Sep. 2023 – Dec. 2023
- MATH08066 – Probability	Sep. 2023 – Dec. 2023
- MATH10093 – Statistical Computing	Jan. 2023 – May 2023
- MATH08051 – Statistics	Jan. 2023 – May 2023

Teaching Assistantships (McGill University)

Preparation of tutorial sessions, office hours availabilities for course related questions. Marking of midterm and final exams, supervision of assignment marking. List of courses:

- MATH 324 – Statistics	Jan. 2022 – May 2022
- MATH 323 – Probability	Sep. 2021 – Dec. 2021
- MATH 203 – Principles of Statistics	Jan. 2021 – May 2021

Statistics Helpdesk (McGill University)

Sep. 2020 – Dec. 2021

Providing help to undergraduate students in Statistics and Probability. Theoretical and programming guidance for courses in the range MATH 2XX - 5XX.

Undergraduate Project Guidance (McGill University)

Guidance of three students towards the completion of an undergraduate project in extreme value theory.

- MATH 470	Jan. 2022 – May 2022
- MATH 410	Jan. 2021 – May 2021 and Sep. 2021 – Dec. 2021

PROGRAMMING

Languages: R, Python, Julia.

LANGUAGES

Bilingual: French, English.